

# eVSM Pharma VSM Application

The Pharma VSM application is used for plant level value stream mapping of pharmaceutical bio tech production. The value stream starts with a vial of cell culture and ends with the active pharmaceutical ingredient (API). The application standardizes the variables, shapes, equations and charts used in such maps.



Easy

Fast

Focused



Standard Variables



Design Macro Shapes



Built-in Equations



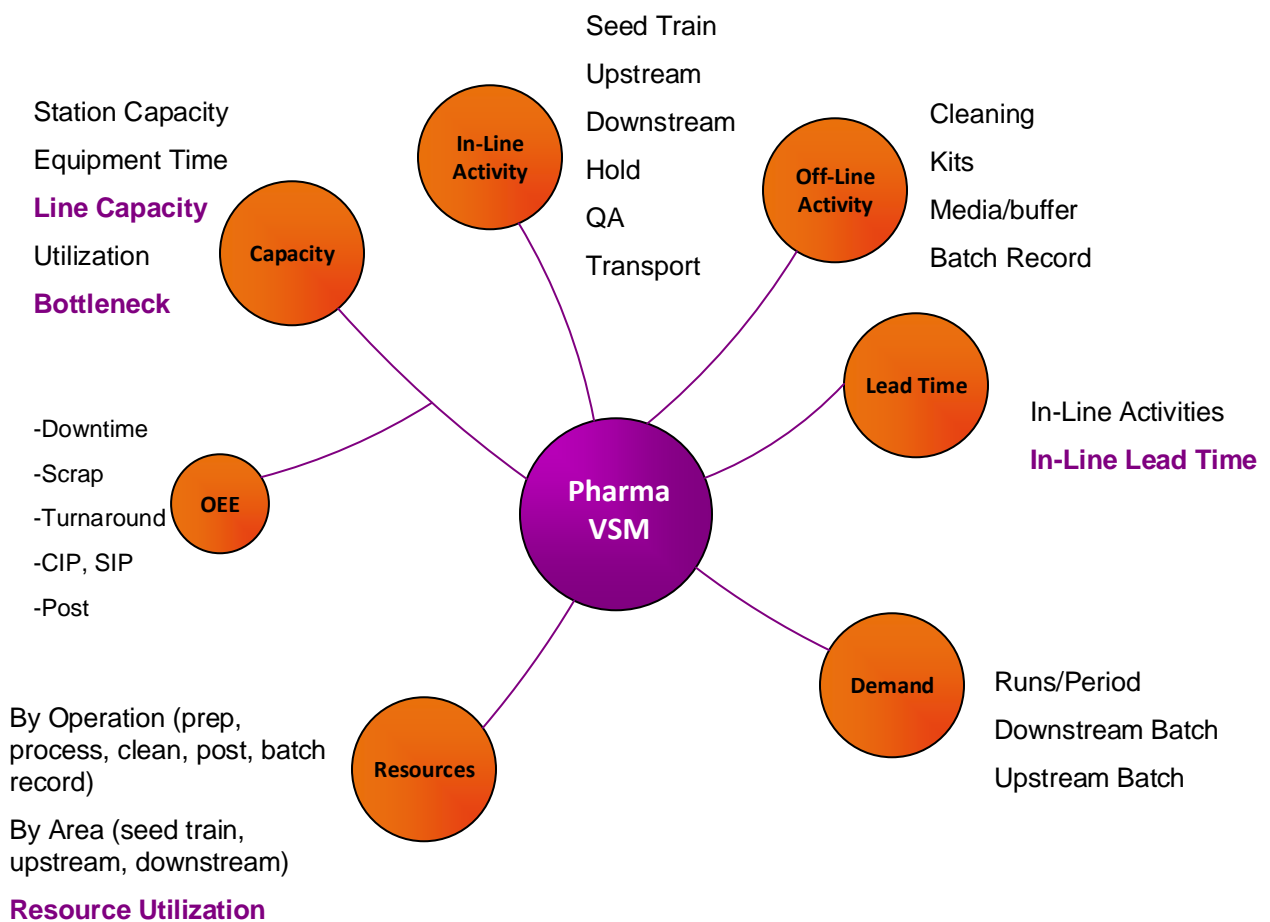
Built-in Charts

The application is designed to be used in two modes:

**Sketch Mode:** Quickly capture the flow of materials and information with no data. Requires minimum learning and gets agreement on the overall value stream

**Analysis Mode:** Add data, either directly on the map, or through Excel. Then analyze for waste and improvements using metrics and visuals for capacity, lead time, and resource utilization.

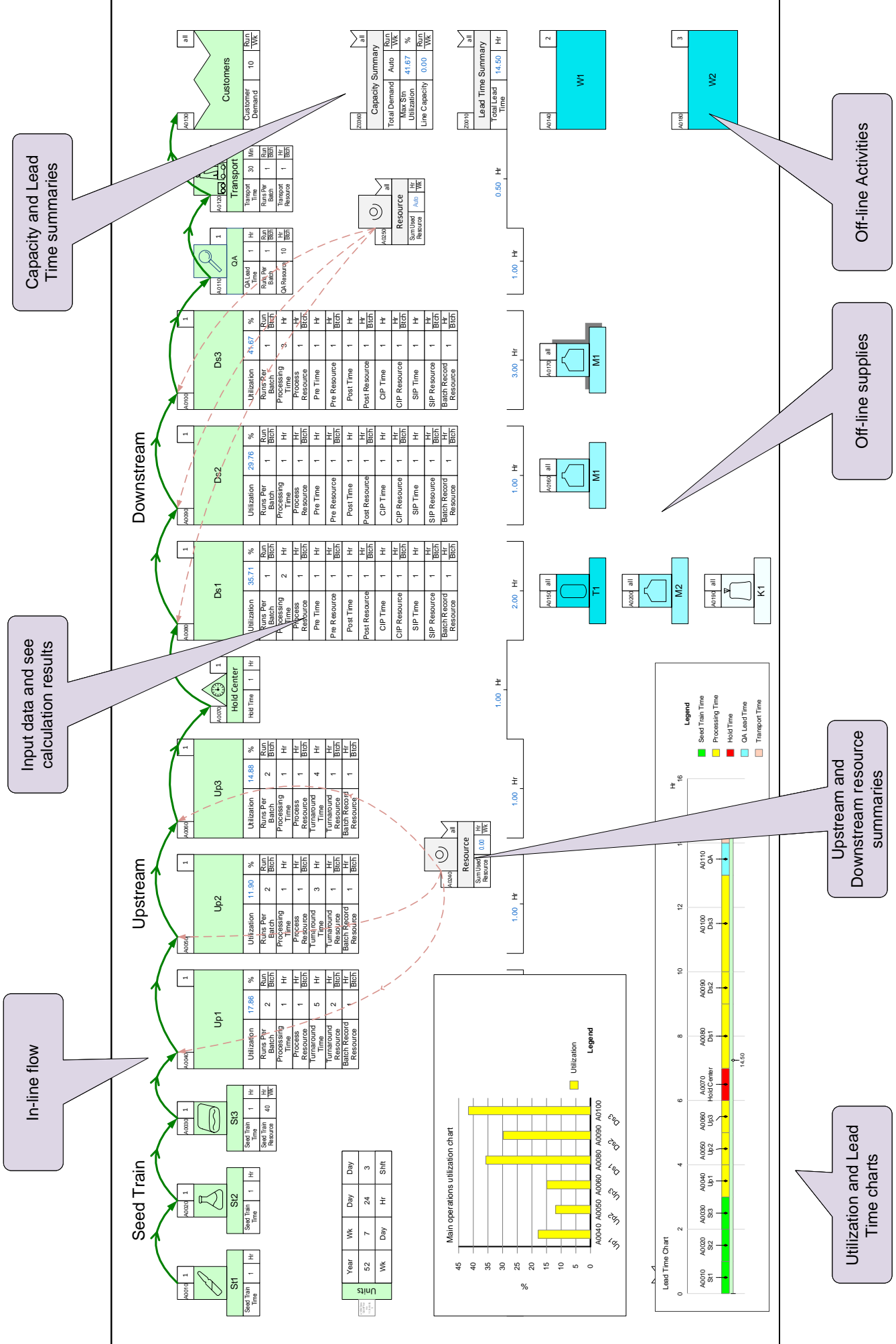
The concepts covered by the application are shown below:



An example map drawn in Pharma VSM is shown overleaf.



# Pharma VSM Application – Example Map



**Customers**

Customer	Demand	Run/Wk
all	10	10

**Transport**

Transport	Time	Run/Wk
all	30	1

**QA**

QA	Run/Wk
all	10

**Ds3**

Utilization	41.67
Runs Per Batch	1
Processing Time	3
Process Resource	1
Pre Time	1
Post Time	1
Post Resource	1
CIP Time	1
CIP Resource	1
SIP Time	1
SIP Resource	1
Batch Record Resource	1

**Ds2**

Utilization	29.76
Runs Per Batch	1
Processing Time	1
Process Resource	1
Pre Time	1
Post Time	1
Post Resource	1
CIP Time	1
CIP Resource	1
SIP Time	1
SIP Resource	1
Batch Record Resource	1

**Ds1**

Utilization	35.71
Runs Per Batch	2
Processing Time	1
Process Resource	1
Pre Time	1
Post Time	1
Post Resource	1
CIP Time	1
CIP Resource	1
SIP Time	1
SIP Resource	1
Batch Record Resource	1

**Up3**

Utilization	44.88
Runs Per Batch	2
Processing Time	1
Process Resource	1
Turnaround Time	4
Turnaround Resource	1
Batch Record Resource	1

**Up2**

Utilization	11.90
Runs Per Batch	2
Processing Time	1
Process Resource	1
Turnaround Time	3
Turnaround Resource	1
Batch Record Resource	1

**Up1**

Utilization	17.86
Runs Per Batch	2
Processing Time	1
Process Resource	1
Turnaround Time	5
Turnaround Resource	2
Batch Record Resource	1

**SI3**

Seed Train Time	1
Seed Train Resource	40

**SI2**

Seed Train Time	1
Seed Train Resource	1

**SI1**

Seed Train Time	1
Seed Train Resource	1

**Units**

Year	Wk	Day
52	7	24
Wk	Day	Shift
3		

**Capacity Summary**

Total Demand	Auto	Run/Wk
20006		10
Max Stk Utilization	Auto	Run/Wk
	41.67	
Line Capacity	Auto	Run/Wk
	0.00	

**Resource**

Sum/Used Resource	Auto	Run/Wk
	0.00	

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Sum/Used Resource	Auto	Run/Wk
	0.00	

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