



University of California
San Francisco

FAS Value Improvement Program

Mini-Session Focus: Identifying and Calculating Value

September 2, 2021

Session Objective

1. Purpose of calculating value (ROI)
2. Types of benefit created
3. Formula components
4. Resources
5. Next Steps

Why value is calculated

- Understand return on investment
- Capture ledger impact
- Quantify re-deployable effort
- Tangible indicator of success

Where value is found (process wastes)



Transportation

Unnecessary movements of products & materials.



Inventory

Excess products and materials not being processed.



Motion

Unnecessary movements by people (e.g., walking).



Under-Utilization

Underutilizing people's talents, skills, & knowledge.



Waiting

Wasted time waiting for the next step in a process.



Overprocessing

More work or higher quality than is required by the customer.



Overproduction

Production that is more than needed or before it is needed.

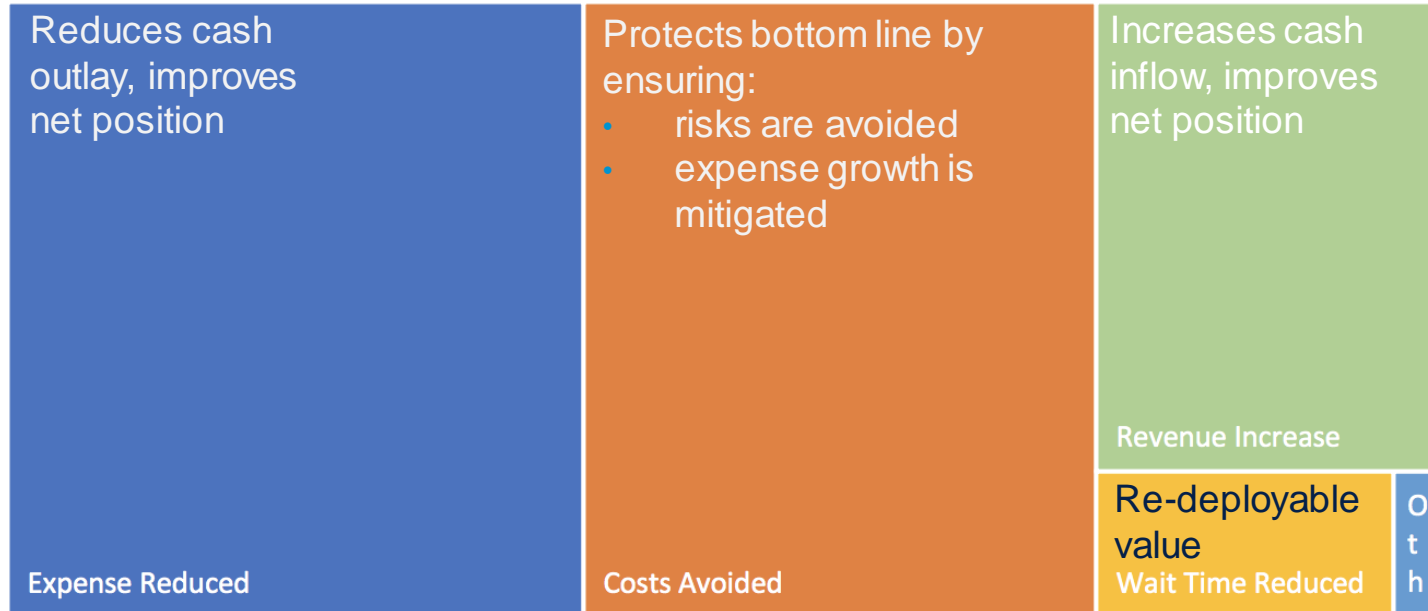


Defects

Efforts caused by rework, scrap, and incorrect information.

Types of benefit created by process efficiency include:

Mix of Benefit Types



Examples of drivers that generate benefit

Driver	Impact
Work orders increased	Direct ledger – revenue increase
Software cost eliminated	Direct ledger – expense reduced
Hours saved	Re-deployable effort
Wait time reduced	Re-deployable effort
Space saved (future)	Cost avoided
Safety compliance violations	Cost avoided
Your project driver?	Your project impact?

Formula Components and Challenges

Component		Definition	Challenge
A	VI SVC Investment	SVC cash disbursed to department	May be intermingled with department investment
B	Department Investment	Cash department spends	May need to be backed into: (expense to date - SVC investment = department inv)
C	Expense	Actual purchases to date (may or may not = investment)	Program owner -> finance coach -> business partner. Weak linkage for accessing ledger.
D	Benefit Created	Results from project impact, measured using a specific driver	Each program different; requires unique approach and calculations. Some drivers, like risk avoidance, are challenging to capture and calculate.
E	\$ ROI	benefit created – expense = \$ ROI <i>Will always be calculated “to date”</i>	
F	% ROI	$\frac{\text{benefit created} - \text{expense}}{\text{expense}} = \% \text{ ROI}$ <i>Will always be calculated “to date”</i>	Not every program will have an investment, therefore, % ROI cannot be calculated for all projects.

Example: HR Roadmap benefit plan

3 Benefits Project Name HR Roadmap - Staff compensation streamlined

BENEFITS

Description	A	B	A x B	FY20	FY21	FY22	Grand total
	# hours or items per period	Value per hour or item	Total value per period				
Revenue increased							
1			\$ -				\$ -
Costs avoided (the additional amount we would have otherwise spent)							
1			\$ -				\$ -
Wait time reduced							
1 Savings of 4000 hours of time per year campuswide	4,000	\$ 43	\$ 172,000	\$ 172,000	\$ 172,000	\$ 172,000	\$ 516,000
2			\$ -				\$ -
Process throughput increased							
1			\$ -				\$ -
Asset utilization improved (increasing the service or revenue produced with the same asset)							
1			\$ -				\$ -
Expenses reduced							
1			\$ -				\$ -
Other							
1			\$ -				\$ -
Grand Total			\$ 172,000	\$ 172,000	\$ 172,000	\$ 172,000	\$ 516,000

Expense Reduced

Reduces cash outlay, improves net position

Costs Avoided

Protects bottom line by ensuring:

- certain risks are avoided
- future expense growth is mitigated

Revenue Increase

Re-deployable value

Wait Time Reduced

Mix of Benefit Types

←

Example: HR Roadmap benefit created result tracking

Revenue Increase

Re-deployable value

Wait Time Reduced

UCSF FAS Human Resources
 Value Improvement, Staff Compensation Value Creation Tracker
 Workstream 1: Straight Replacement

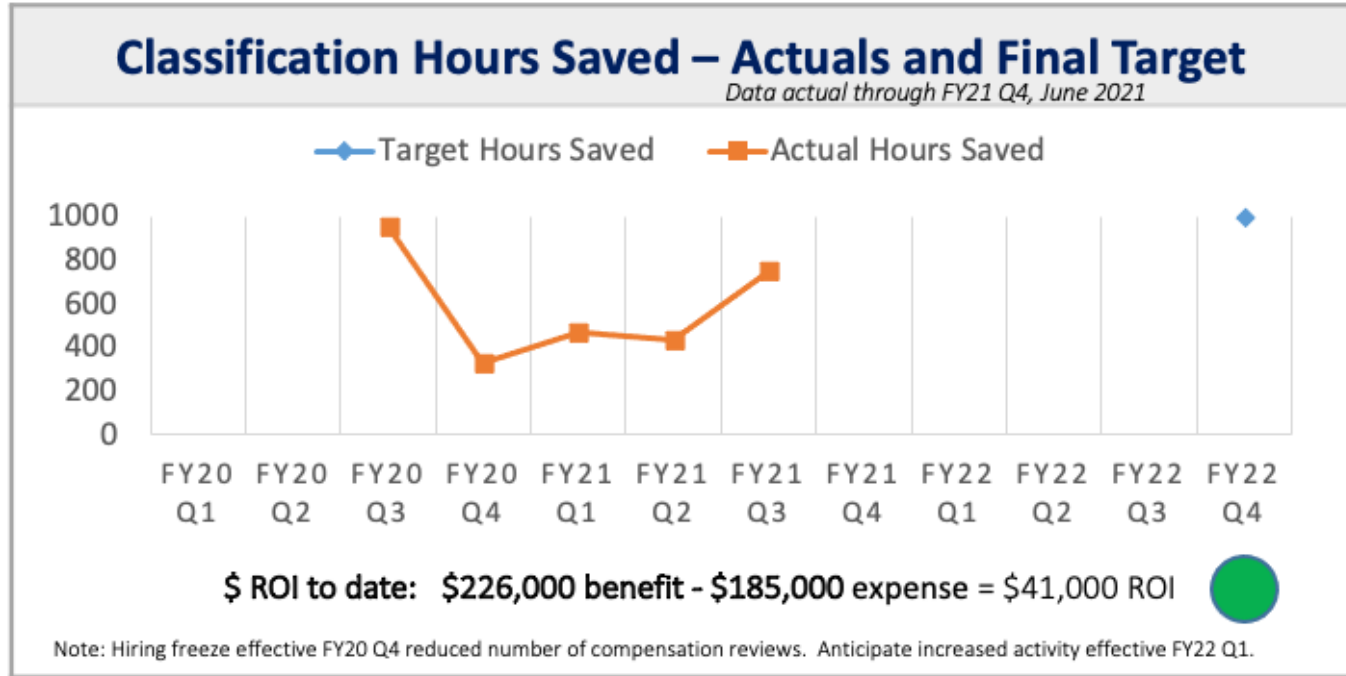
Table Maintenance:

- 1 COL D Enter hours in table
- 2 COL E Confirm/update hourly rate
- 3 COL F Confirm/update benefits %
- 4 COL H/I Confirm results are correct

Qtr	Step	Role	A	B	C = A-B	D	E	F = E * 1.35	G = C * F	H	I
			Old Hours	New Hours	Saved Hours	Est # of cases	Avg hourly rate	Avg Sal + Benefits cost	Est value created	Total Hours Saved	Total Value Created
FY20 Q4	1	dept manager	4	2	2	55	70	95	10,395	330	25,245
	5	HR Comp specialist	4	0	4	55	50	68	14,850		
FY21 Q1	1	dept manager	4	2	2	78	70	95	14,742	468	35,802
	5	HR Comp specialist	4	0	4	78	50	68	21,060		
FY21 Q2	1	dept manager	4	2	2		70	95	0	0	0
	5	HR Comp specialist	4	0	4		50	68	0		



Example: HR Roadmap benefit created, quarterly report out



Resources

- Deep Dive Tutorial: Value Creation
- Coaching: julie.oneal@ucsf.edu
- Tools: <https://improve.ucsf.edu/value-improvement-toolkit>

Next Steps

- Consult:
 - converse with project sponsor
 - converse with PMO and Finance coaches
- Decide: does your project generate measurable value?
- Apply: <https://fas.ucsf.edu/application>