Show me the money!

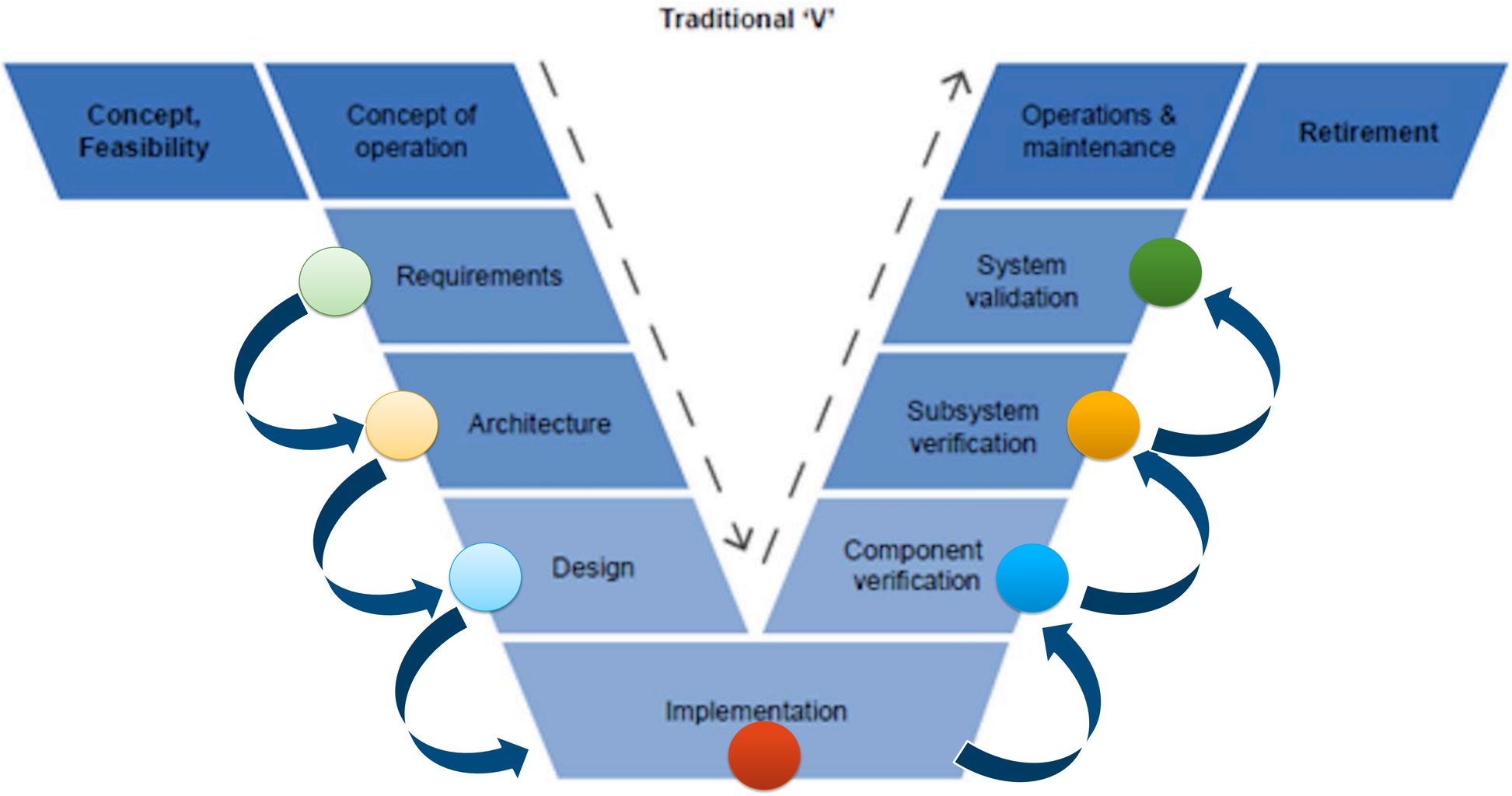
Streamline the Flow of Value

Reduce the Risk of Late Integration Breakage

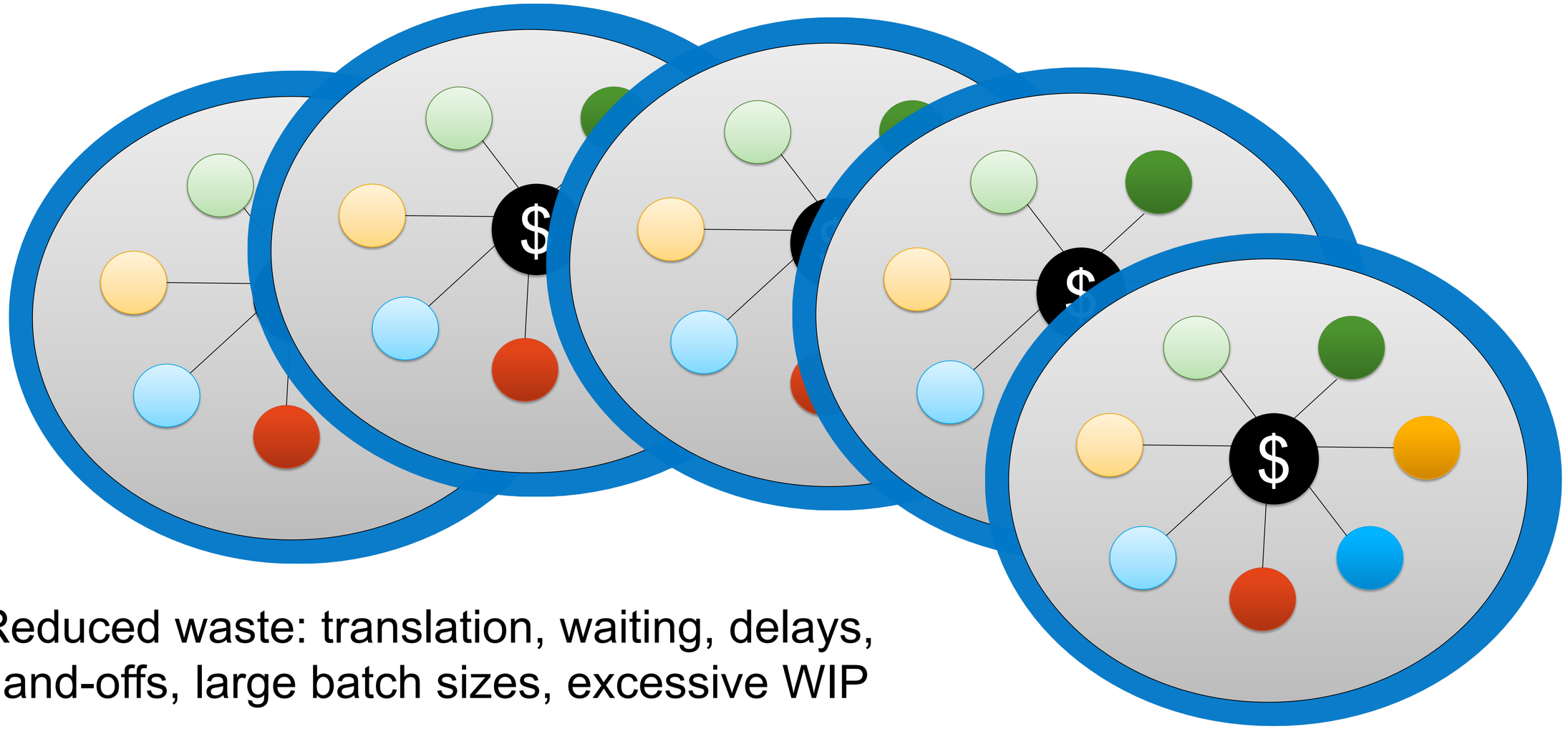
Controlling Work in Process

Scenario 1
Streamline the Flow of Value

What Inhibits Value?



What Accelerates Value?



Reduced waste: translation, waiting, delays, hand-offs, large batch sizes, excessive WIP

Comparison of Effort – 35% Savings

S	# Stakeholders	20
F	# Features	10
TCR	Time to Capture Requirements per Feature	8
TCA	Time to Capture Architecture per Feature	8
TCD	Time to Capture Design per Feature	16
TTI	Time to Implement per Feature	24
TTCT	Time to capture and execute component test per Feature	8
TTPF	Total time per feature	64
RT	Review time as percentage of Capture time	0.1
CMP	Change Management Process per Feature	
RFL	Effort Reduction from learning each iteration	0.1

	V-model Effort to get to Testing is	
Rqts	(F*TCR) + (F*TCR*S*RT)	240
Arch	(F*TCA) + (F*TCA*S*RT)	240
Design	(F*TCD) + (F*TCD*S*RT)	480
Impl	(F*TTI) + (F*TTI*S*RT)	720
Comp Test	(F*TTCT) + (F*TTCT*S*RT)	240
	TOTAL HOURS	1920

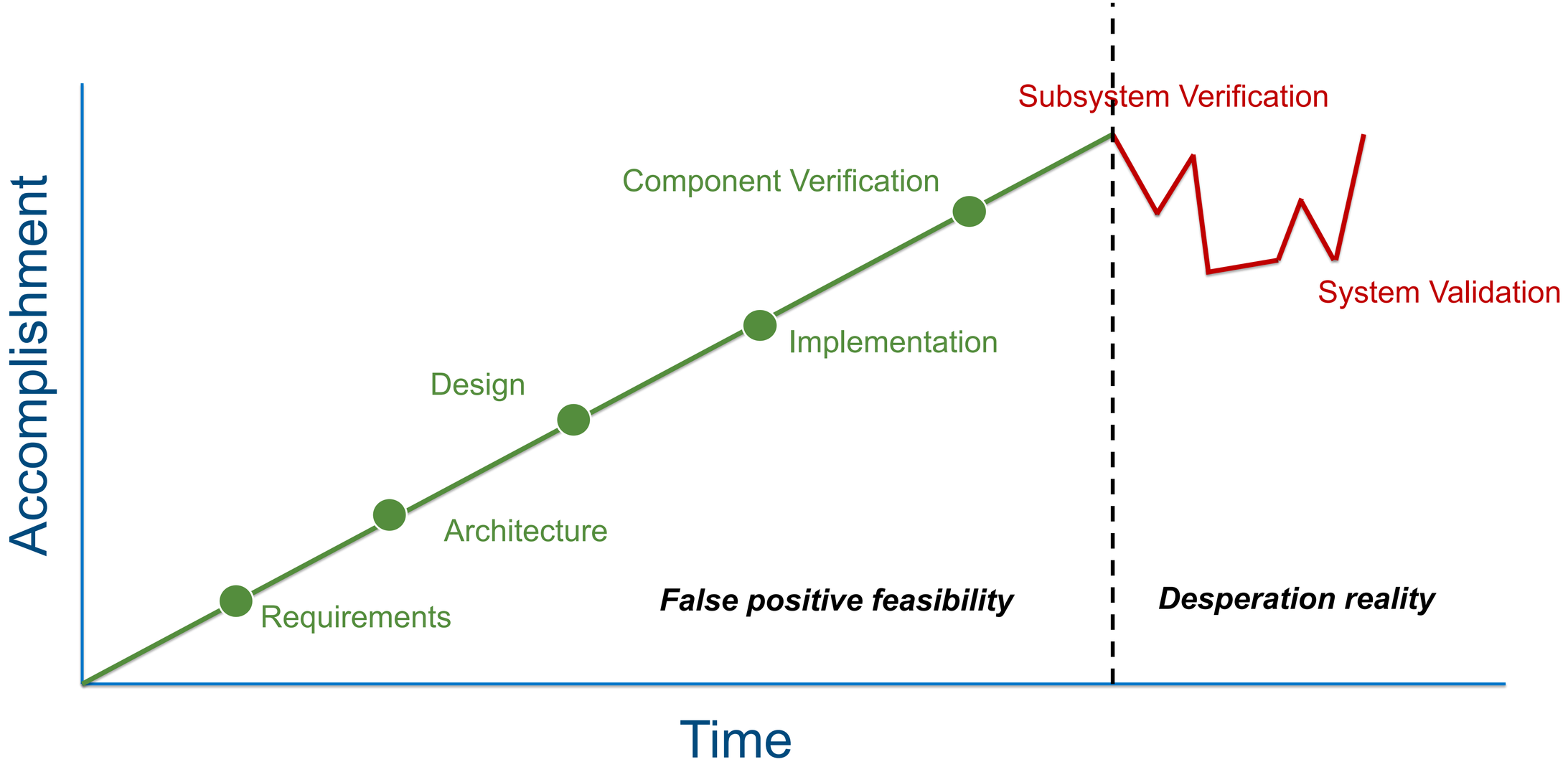
all time is in hours

30-week project, 100 people
= savings $67,000.
Annual savings = $116,000.

Iterative Development			
Iteration	Effort	Review	Total
1	64.00	128.00	192.00
2	57.60	115.20	172.80
3	51.84	103.68	155.52
4	46.66	93.31	139.97
5	41.99	83.98	125.97
6	37.79	75.58	113.37
7	34.01	68.02	102.04
8	30.61	61.22	91.83
9.00	27.55	55.10	82.65
10.00	24.79	49.59	74.38
TOTAL Hrs	416.85	833.69	1250.54

Scenario 2
Reduce Late Integration Breakage

Late Integration Breakage (LIB)



SAFe ® Practices Reduce LIB Cost

variable	**Basic parameters**	
TART	Number of Teams	10
ASPI	Avg number of stories per team in PI	50
PSP	% of stories with dependency	20%
ACPH	Avg per hour cost per person	$100
PCE	% Dependencies with cascading effect	50%
	Manage dependency in PIP	
IPIP	Avg time in minutes to manage dep in PIP, per team	10
	Managing dependency outside of PIP	
MOPIP	Schedule a meeting, reserve room, coordinate times, in minutes	30
OPIP	Attend meeting, time per team, in minutes	30
CST	Context-switching time for attending a meeting, in minutes	25
	COST SAVINGS - managing dependencies in PI Planning	
	Time in PIP in hours for ART=TART*ASPI*PSP*IPIP*2(teams per dep)/60(min in hour)	33.33
	Time outside PIP in hours for ART=(TART*ASPI*PSP)(MOPIP+OPIP*2(teams per dep))/60(min per hour)	150
	Time outside PI with context-switching time added	212.50
	Difference, in hours	179.17
	With cascading effect	268.75
	Higher cost of managing dependencies outside of PI Planning	**$26,875**

One ART (100 people) savings per quarter = $56,875

Annual savings = $227,500.

COST SAVINGS - catching a dependency early	
Savings per dependency = defect discovery cost + triage cost + blamestorming cost + rework	
2	Defect discovery cost in hours
4	Defect triage cost in hours
4	Blamestorming cost in hours
20	Rework cost in hours
30	Total hours
$3,000	**Total cost per late-integration defect caused by missed dependency**
10	Number of Deps caught early
$30,000	Total savings for ART

Scenario 3
Control WIP

Research on Context Switching

It takes an average of **25 minutes to resume** a task after being interrupted.

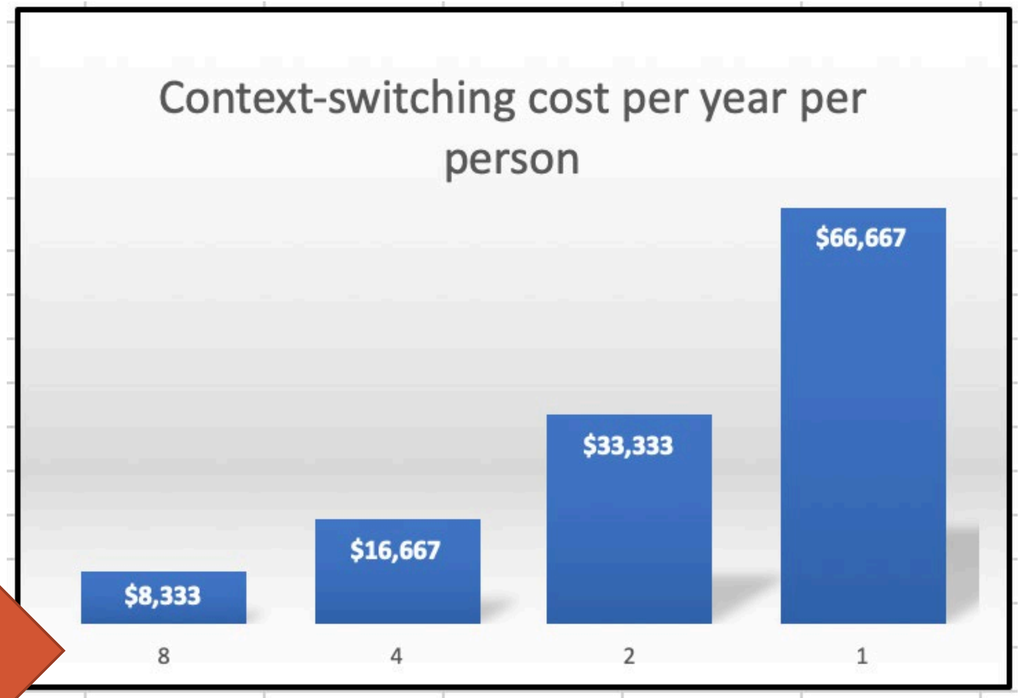
Juggling **two** tasks at a time = 40% of your productive time for each and **20% lost to context switching**

We spend an **average of just 1 minute and 15 seconds** on a task before being interrupted.

https://blog.rescuetime.com/context-switching/

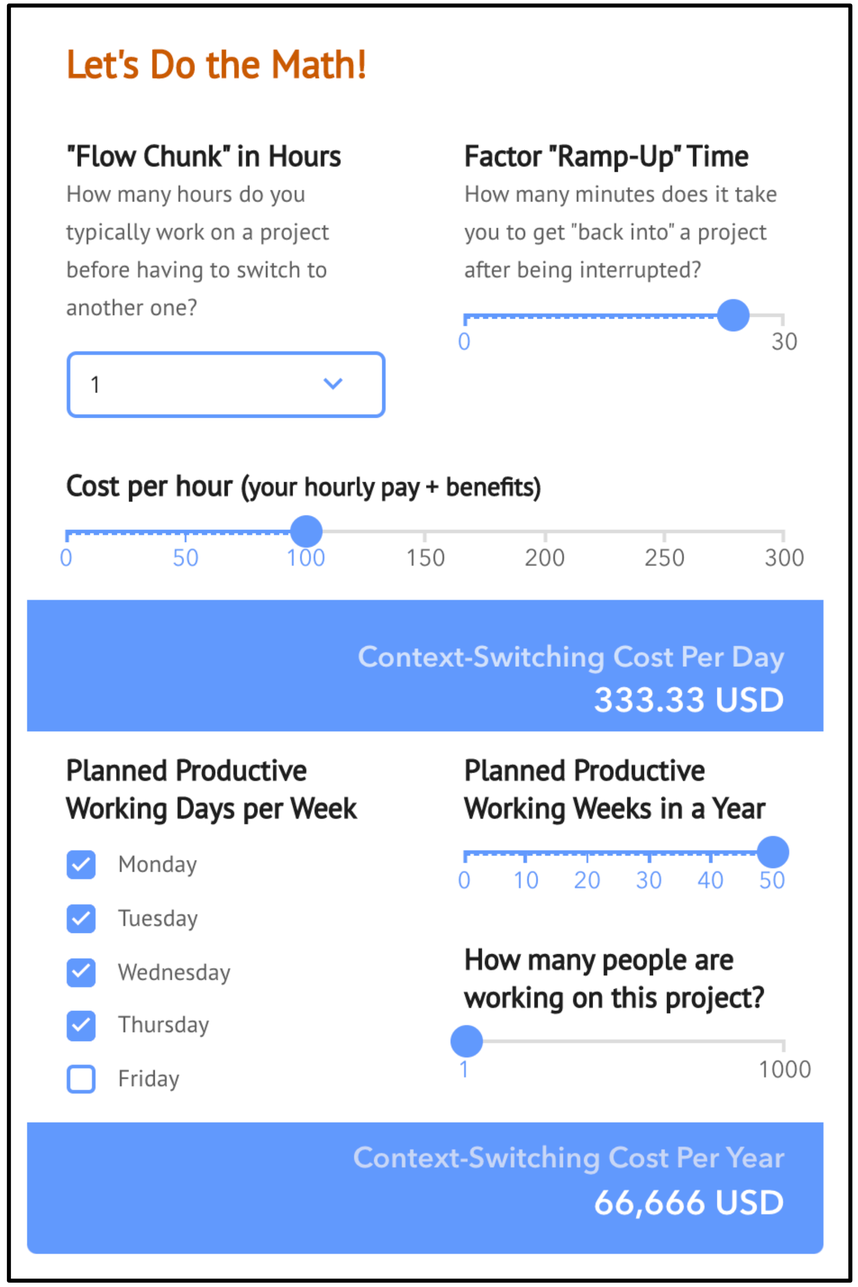
https://blog.trello.com/why-context-switching-ruins-productivity

Cost of Context-switching



Chunks of uninterrupted work each day in hours

https://321gang.com/controlling-wip-calculator/



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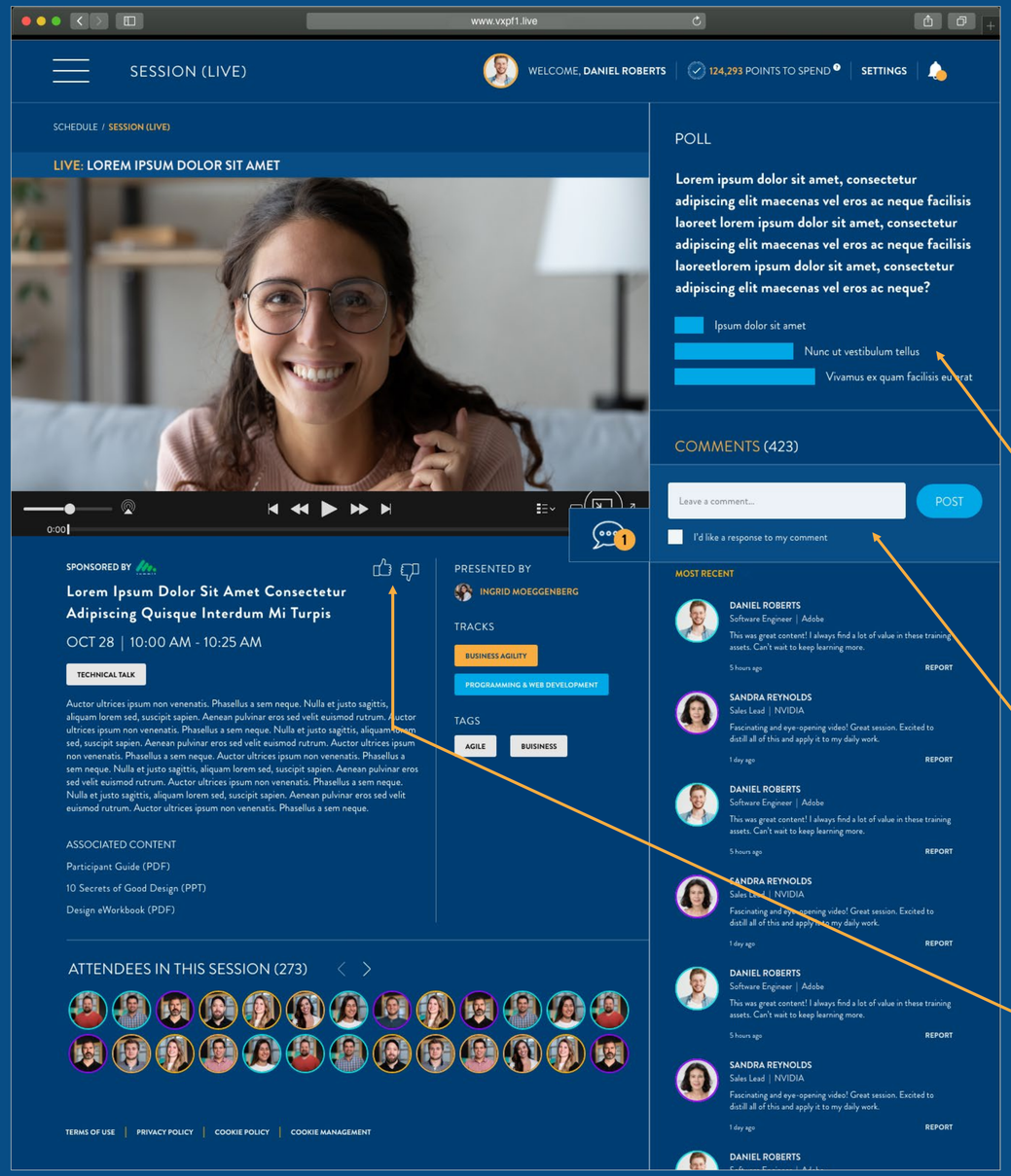
Join me at the Meet the Speaker Session!

Please refer to the agenda for scheduled times

Participate in polling, post comments, and rate sessions



1. Polling
2. Comment
3. Thumbs up or down

Thank you!