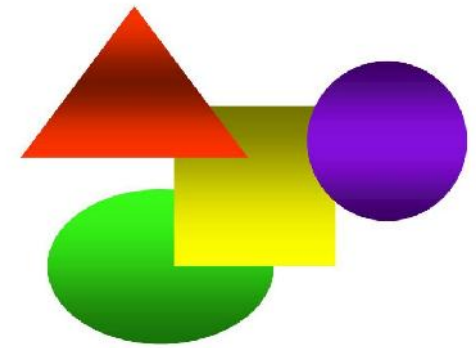


Agile Assessments

Beyond Radar Charts



Andrew Kazarinoff

CSM, CSP, SPC

Qualytic Consulting

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Agenda

- The Challenge
- Analysis Options
- Prioritize
- Dysfunctions
- Selection
- “Reinforcing Cycles”

Rally Insights™ – excellent, but ...



Productivity ⇔ Throughput
Predictability ⇔ Delivered vs Forecast
Responsiveness ⇔ Lead Time
Quality ⇔ Defect Density

The Goal: Cure and Prevention

- The highest-value actions
- The real problems / dysfunctions
 - Most assessments reveal only symptoms
- How to act on the information



Systematic Approach:
Transparency
Traceability

Why We Do Assessments

Agile transformations

Continuous improvement

Opportunities for innovation

Context for **organizational change**

Opportunities for **focused coaching**

Topics for spot training

“We’re worth the money”

Assessments

Value of training

Retrospective

Team performance

Agile maturity

Agile readiness

Transformation value

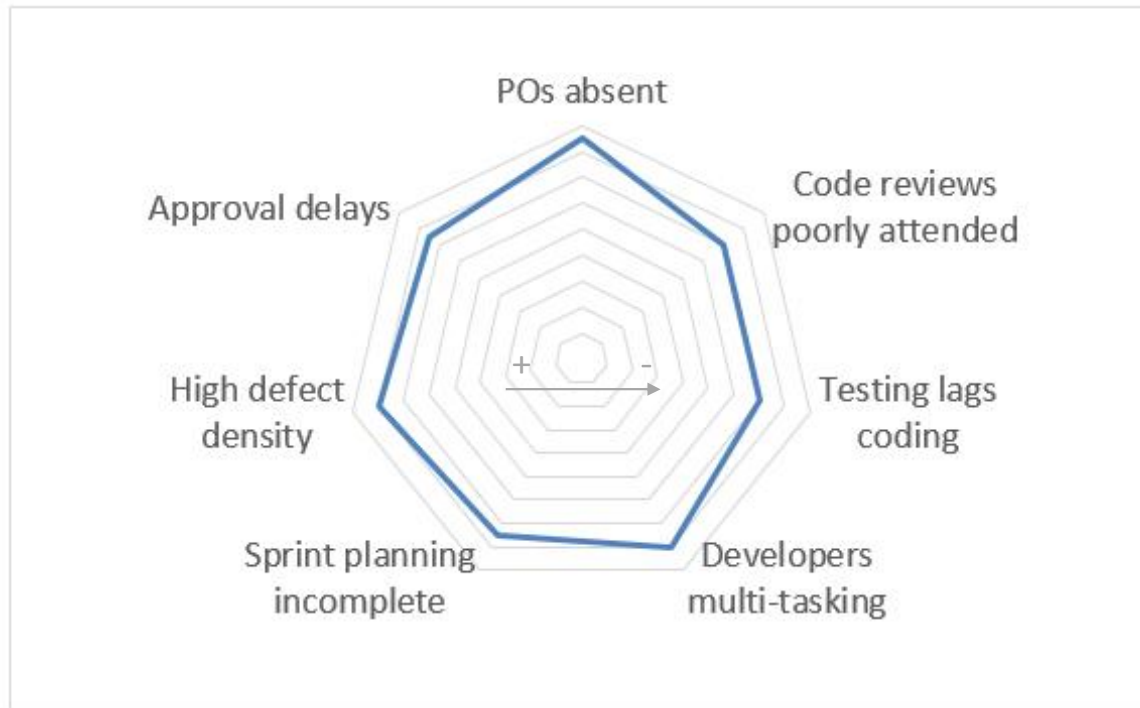
Organizational impediments

And then...

- What do we do with the results?

- What actions are the most valuable?

Exercise: Prioritize for Action



Symptom: Release forecasts not met

Results of Exercise – 4 teams

Rank

1 2 3 5 8 13 21

1=Least important

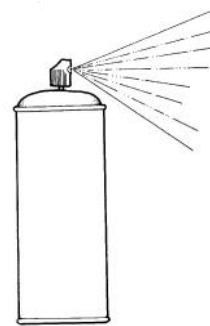
21=Most important

	Team 1	Team 2	Team 3	Team 4	Team 5	Team 6	Team 7	Team 8	AVG	STDEV
POs absent	21	21	21	13					19.0	4.0
Code reviews poorly attended	5	8	3	5					5.3	2.1
Testing lags coding	13	3	3	8					6.8	4.8
Developers multi-tasking	13	3	8	8					8.0	4.1
Sprint planning incomplete	13	5	8	21					11.8	7.0
High defect density	8	1	5	5					4.8	2.9
Approval delays	8	2	13	5					7.0	4.7

Fix **symptoms** or dysfunctions?

Present vs *Future*

Option: Fix the symptoms



Fix the Symptoms

Symptom	Action
POs absent	BAs refine backlog
Code reviews poorly attended	Tech Lead approves/rejects. Serve snacks
Testing lags coding	Add testers. Do only feature testing
Developers multi-tasking	Add developers.
Sprint planning incomplete	Longer Sprint Planning sessions. Shorter sprints
High defect density	Add testers. Buy testing apps
Approval delays	Test in prod-like environment.

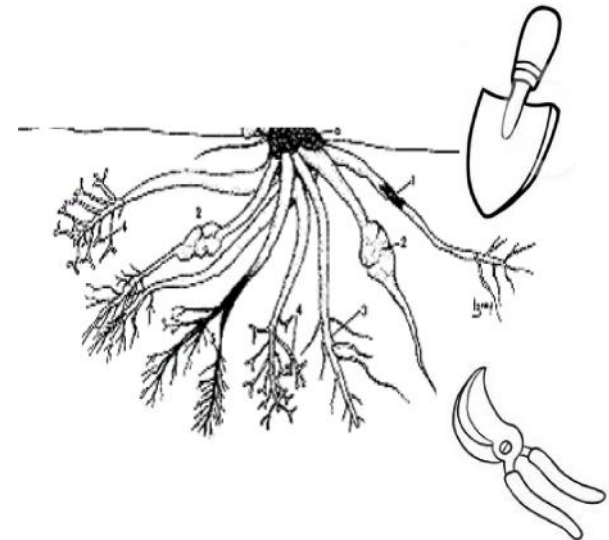
Fix **symptoms** or dysfunctions?

Present vs *Future*

- Or:

Remove underlying dysfunctions

- Root causes as surrogates for dysfunctions



Chain of whys

Symptom: My car won't start

Why? - Battery dead

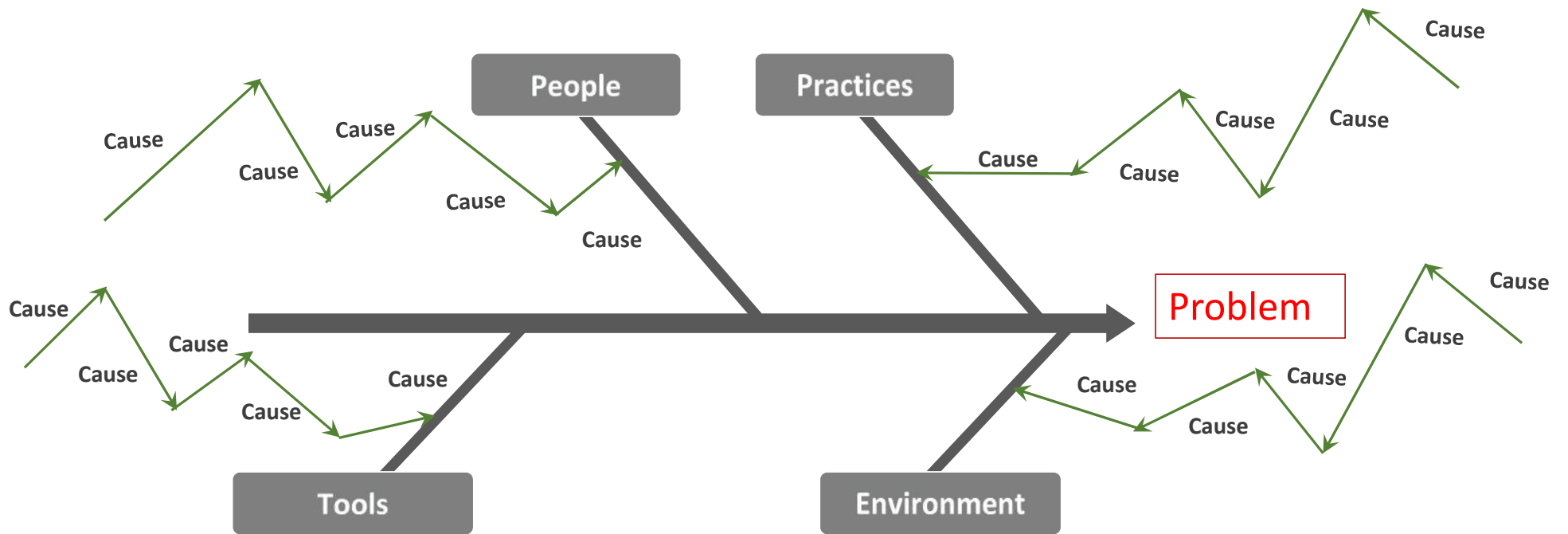
Why? - Alternator not charging

Why? - Alternator belt broken

Why? - Alternator belt beyond useful service life

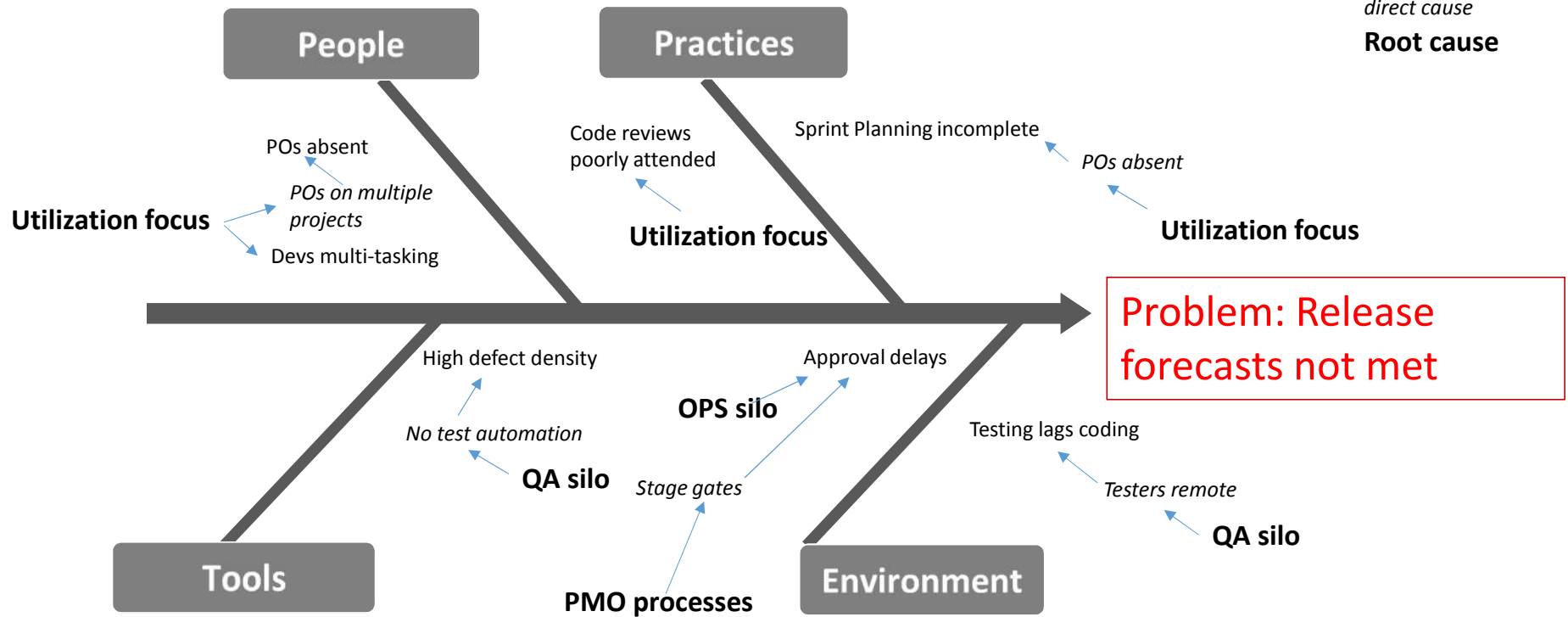
Why? - Not maintaining my car on schedule = **Root Cause**

Five Whys on the Fishbone



Dysfunctions

Legend:
symptom
direct cause
Root cause



Now we have ...

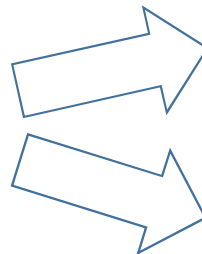
Root Causes

Utilization focus

OPS silo

PMO processes

QA silo



Symptoms - Present

POs absent

Code reviews poorly attended

Testing lags coding

Developers multi-tasking

Sprint planning incomplete

High defect density

Approval delays

Symptoms Future

?

?

?

?

How identify the highest-value targets for cure and prevention?

- Brainstorming
- Dot voting
- Expert opinion
- WSJF
- Wiegers weighting

Cost of Delay (CoD)

the economic value lost as the result of late (or no) ...

- ... Delivery to a release-ready state

- ... Deployment into a market window

= "Opportunity Cost"

CoD Components

User (feature) value

Preferences, revenue impact, penalty for late delivery

Time value

Decay of User value – upcoming deadlines, loss of good will due to late delivery

Learning value

Early risk reduction, value of learning (technology, domain), enablement of new opportunities

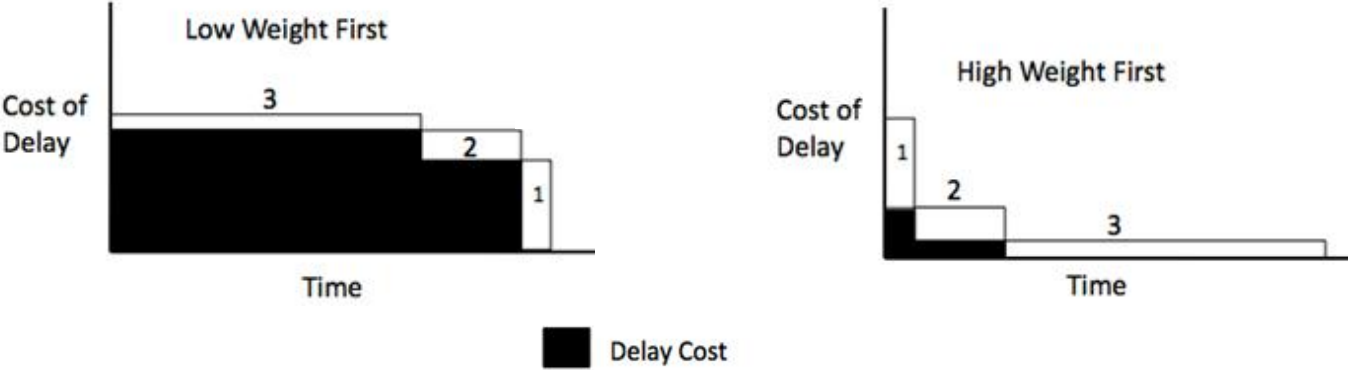
Example:

	Cost of Delay			
	User	Time	Learning	Total
A	3	8	8	19
B	8	3	2	13
C	3	3	2	8

(Fibonacci Numbers)

Weighted Smallest Job First

Project / Feature	Total Cost of Delay	Effort (or Time)	Weight = CoD/Effort
1	10	1	10
2	3	3	1
3	1	10	0.1



Exercise -- WSJF

	Total CoD	Effort to Correct	CoD/Effort
Utilization focus			
OPS silo			
PMO processes			
QA silo			

Results of four teams

Team 1	CoD/Effort
Utilization focus	0.6
OPS silo	1.0
PMO processes	1.0
QA silo	1.0

Team 2	CoD/Effort
Utilization focus	0.7
OPS silo	0.7
PMO processes	1.7
QA silo	1.0

Team 3	CoD/Effort
Utilization focus	0.6
OPS silo	0.4
PMO processes	1.0
QA silo	0.6

Team 4	CoD/Effort
Utilization focus	1.0
OPS silo	0.6
PMO processes	0.6
QA silo	2.6

AGGREGATE STDEV	CoD/Effort
Utilization focus	0.4
OPS silo	0.2
PMO processes	0.4
QA silo	1.0

Ranking Dispersion

Symptom Ranking

POs absent	4.0
Code reviews poorly attended	2.1
Testing lags coding	4.8
Developers multi-tasking	4.1
Sprint planning incomplete	7.0
High defect density	2.9
Approval delays	4.7
	4.2

Root Cause Ranking

Utilization focus	0.4
OPS silo	0.2
PMO processes	0.4
QA silo	1.0
	0.5

Average Standard Deviation



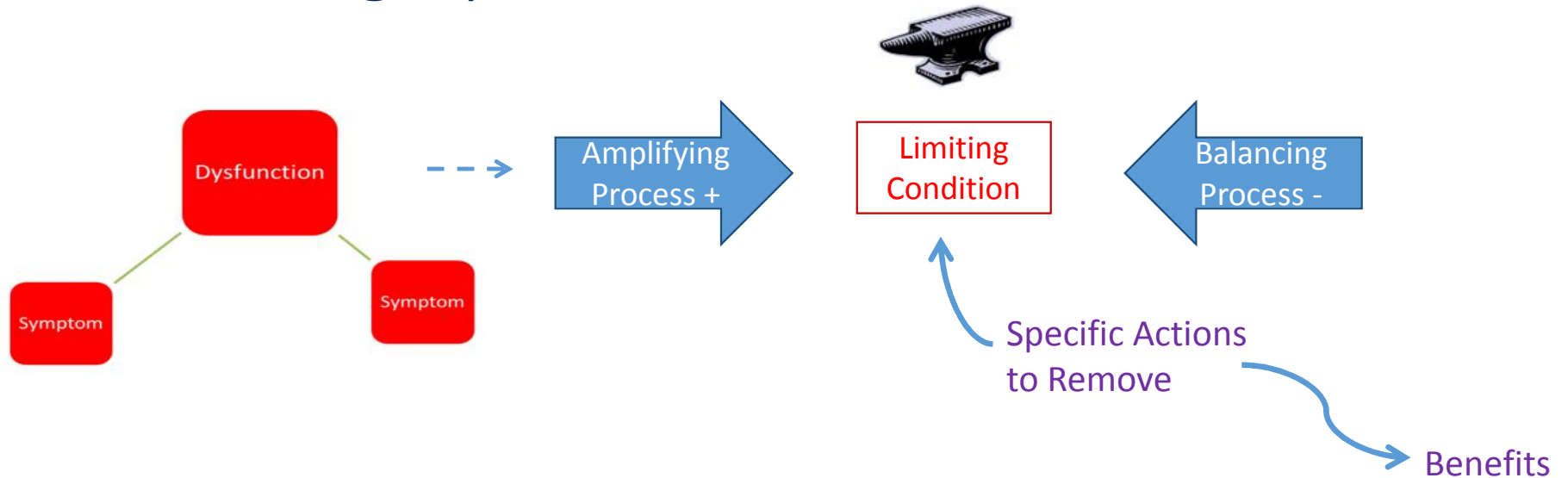
Wiegiers Method

<i>Weight Factor</i>	2	3			1		
	Benefit if Corrected	Penalty if NOT Corrected	Total Value	Value %	Cost of Correcting	Cost %	Priority
OPS Silo	5	2	16	11.4%	2	13.3%	0.86
PMO Processes	8	8	40	28.6%	5	33.3%	0.86
Utilization Focus	5	8	34	24.3%	3	20.0%	1.21
QA Silo	13	8	50	35.7%	5	33.3%	1.07
	31	26	140	100%	15	100%	

Priority = value % / (cost % * cost weight)

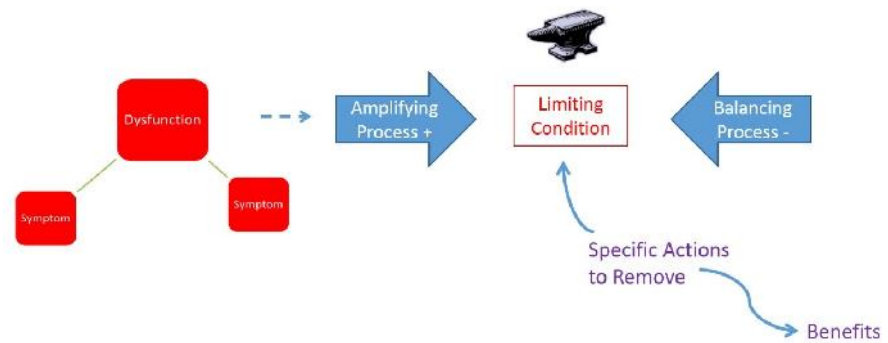
Now, how about actions?

Reinforcing Cycles



Dysfunction	Symptoms / Penalties	Amplifying Process	Limiting Conditions	Balancing Processes	To Remove Limiting Condition	Realizable Benefits
Inflexible deadlines	Increasing work stress Overtime work	Add and grow staff from within	Waterfall planning Utilization focus	Hire more contractors More status updates	Smaller, more frequent releases	Better morale Higher energy
Belief / Norm: Long hours are the path to getting promoted	Low morale low productivity burnouts	Shorten working hours	Constant workload and deadlines; leadership sets model of 70 hrs/week	People take work home	Leadership sets example of moderate, sustained pace	Higher productivity

Experience at XYZ Co.



	Dysfunction	Symptoms / Penalties	Amplifying Process	Limiting Condition	Balancing Process	Actions -- To Remove Limiting Condition	Realizable Benefits
	OPS Silo	Approval delays	Increase meetings	Physical separation	Scheduling conflicts	Collocate OPS with Dev Teams	More frequent delivery
	PMO Processes	Approval delays	Lip service to stage gates	Perceived need to control the dev stream	Increased documentation of stage gates	Encourage illusion of control	More frequent delivery
	QA Silo	Testing lags coding	Borrow testers during sprints	Testers assigned to more than one team	Unpredictable availability of testers	Agree to dedicate testers	Higher quality
	Utilization focus	Developers multi-tasking	Training	Task effort estimates unrealistic	Developers working overtime	Improve estimation skills	Higher quality

How will you think about your next assessment?

Andrew.Kazarinoff@qualytic.com

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SUBJECTS	Year	REPORT ON STUDIES					
		1	2	3	4	5	6
Chem. II	12/11	5.0	5.0	5.0	5.0	5.0	5.0
Adv. Lit.	9/10	B	A	A	A		
Adv. Comp.	12/12	A	A	A	A		
Mod. Lit.	12/12	5.0	4.5	4.5	5.0	5.0	5.0
Typing I	RB				B	A	A
					A	A	A
HEALTH	Phm 12						
Physical Education				C			