

How Agile can Help Turnarounds to Succeed

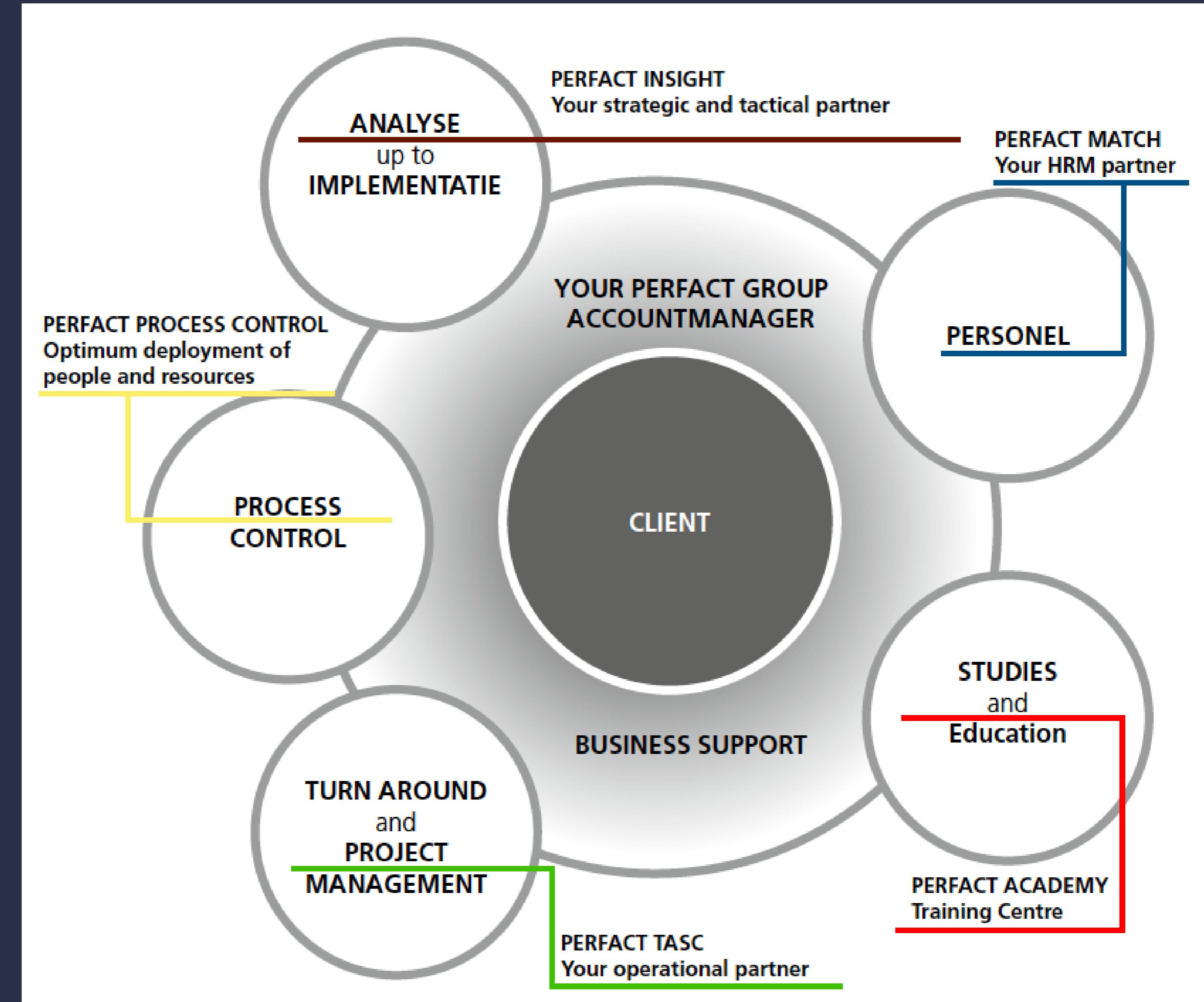


Lars Bessems
1973

Expertise Manager Turnarounds & Projects
Director of Events PMI Netherlands Chapter

Since 1996 experience in Petro-/ Chemical / Gas /
Pharmaceutical and Electricity Industry

Master in Biomechanical Engineering
Post Academic Master in Business Administration
PMI-PMP / -SP /-ACP
PRINCE II
Scrum Master PSM-I
Lean Six Sigma Black Belt



Complete
solution from
A to Z ...

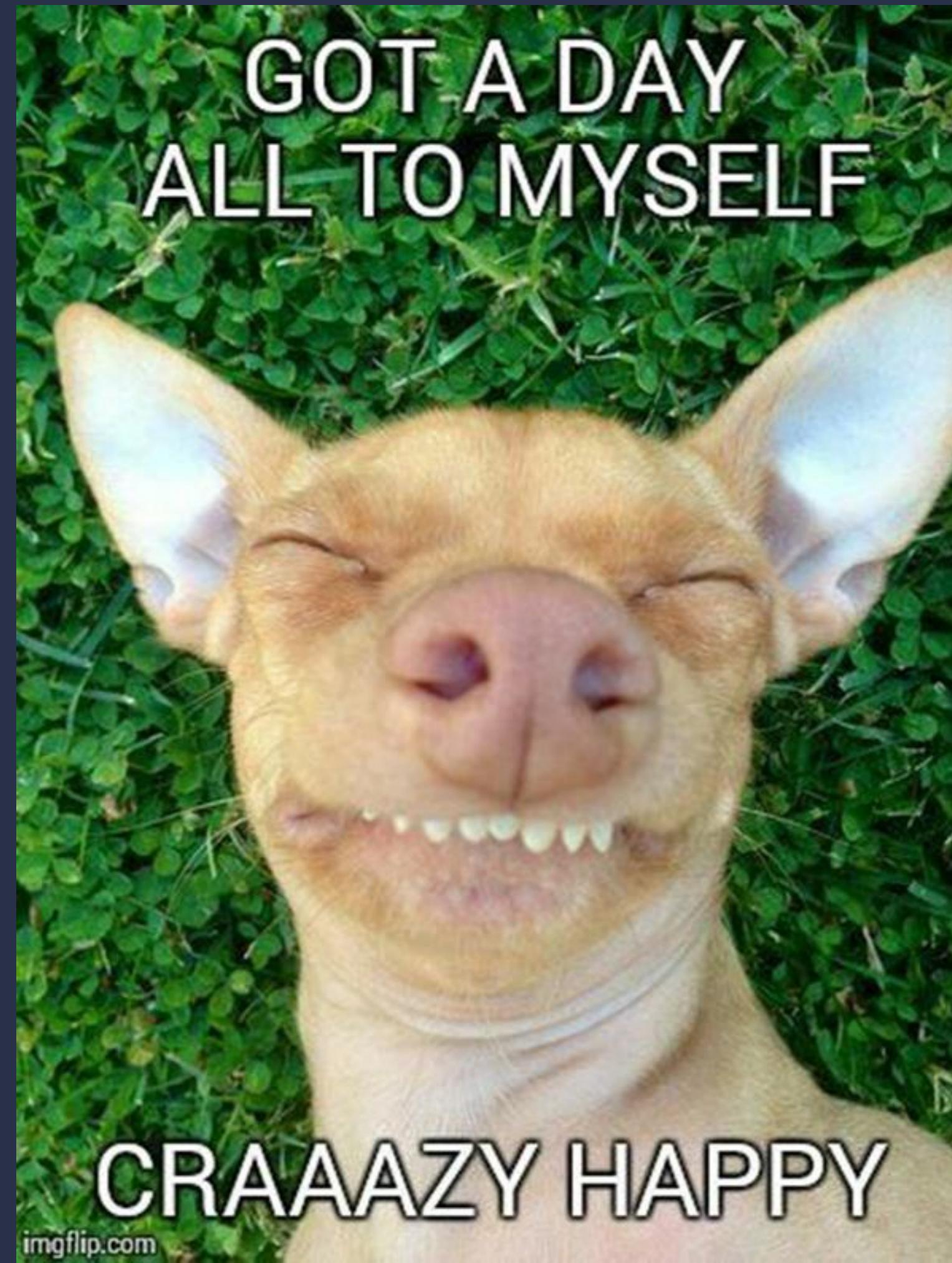
All relevant information for
Maintenance and Turn Arounds

Schedule information for
Maintenance and Turn
Arounds

Why are you here?



Unhappy family



Day off ?!

6

Next
↓

↑
Previous

Good food and drinks ?





Networking ?



Networking !

Improve yourself !



How wonderful it is that
nobody need wait a
single moment
before starting
to improve
the world.

Anne Frank



Improve the world !



Happy family !!!!



Empirical User Stories

TA Service provider meets Asset Owner

Things that happen very often





Too late started.

Nothing much has happened

Priority Daily Maintenance.

Not much will happen



TA Process is not familiar.

TA only happens every 4-5 year





Stepping into the unknown.

TA maybe even for the First time

Time for change.

TA Improvement



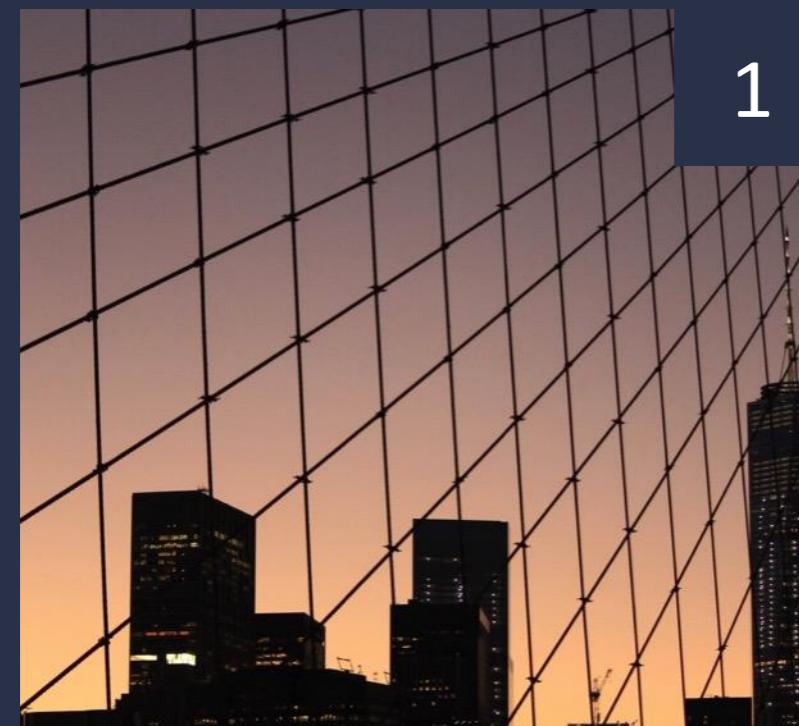
TOGETHER WE CAN DO IT

Make it
happen!

YES
WE
CAN

SUCCESS

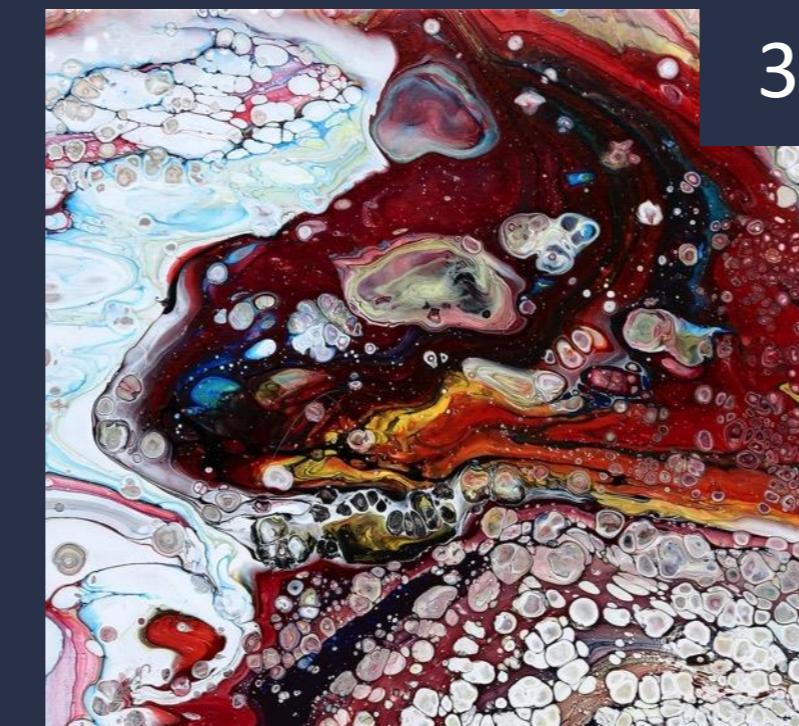
Always bear these **points** in mind
with the premise of the time still available
till Execution of the TA



1



2



3



4



5

What

can we do in this time period

Why

should we do it this TA

When

Should we do it!

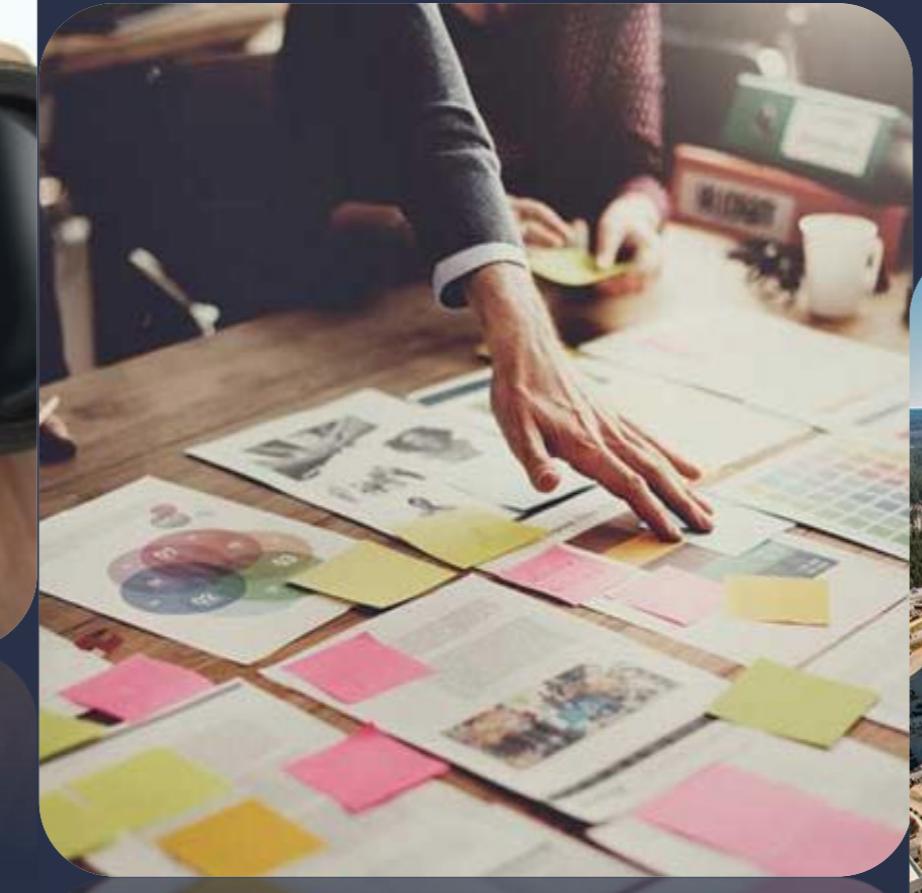
How

can we do it

Who

can do it

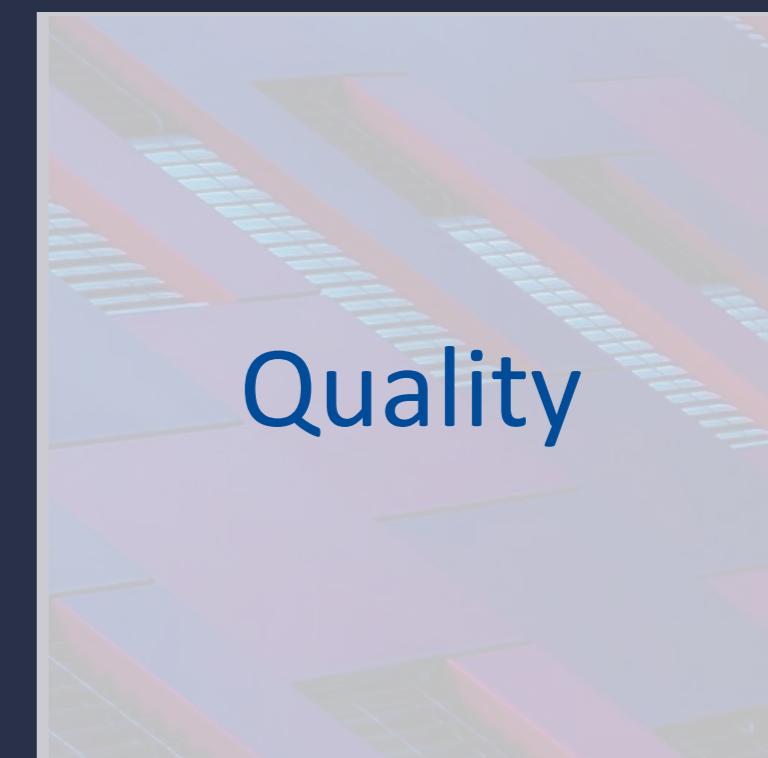
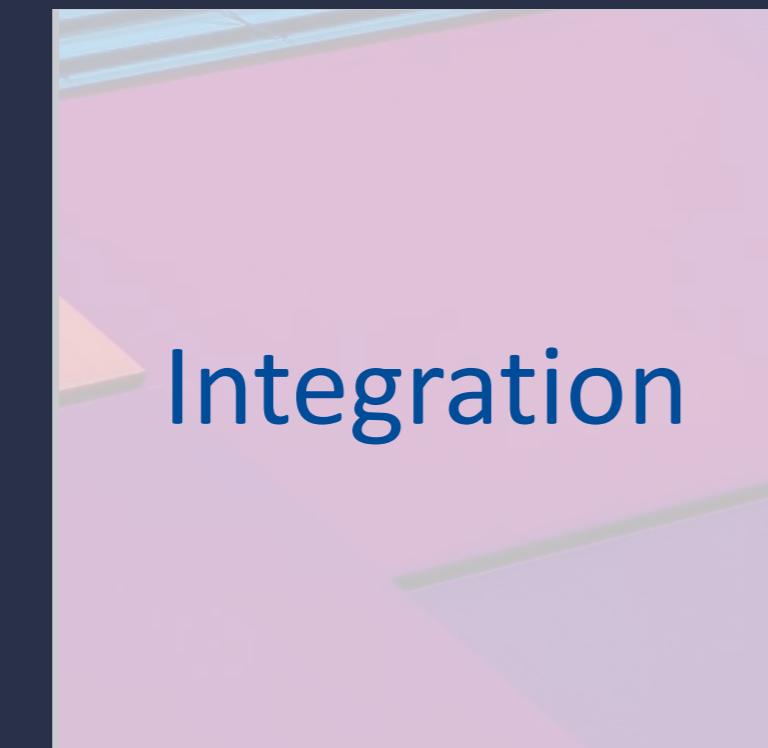
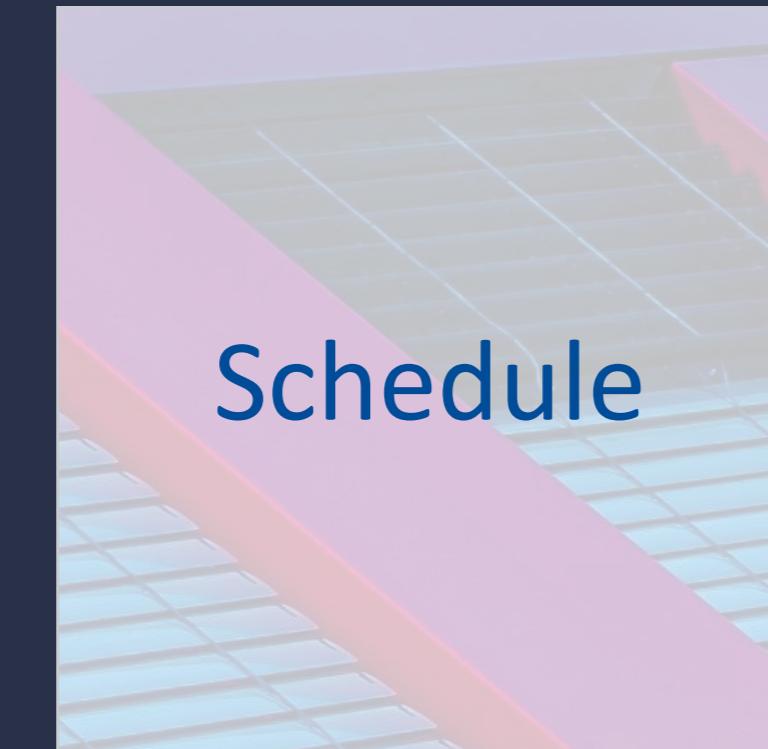
TA Project Phases and their needed time periods per TA Category



Waterfall Method



TA Knowledge Area's



Deliverables per TA Project Phase and Knowledge Area

	Preparation Phase	Scoping Phase	Planning Phase	Execution Phase	Close-out Phase	
Cat. 1 -26						
Cat. 2 -20						
Cat. 3 -14						
Scope	<ul style="list-style-type: none"> Preliminary Scope + Capex Projects Define Scope Management Plan 	<ul style="list-style-type: none"> Gatekeeping Technical Task Clarification Scope Freeze Initiate Scope Change procedure 	<ul style="list-style-type: none"> Prepare Scope + Capex Projects workpackages Tagging completed 	<ul style="list-style-type: none"> Prepare Scope Changes Punch list 	<ul style="list-style-type: none"> Punch List closed As-built documentation completed Preliminary Scope next TA 	
Schedule	<ul style="list-style-type: none"> Milestone Schedule 	<ul style="list-style-type: none"> Follow-up Milestone Schedule Define Schedule Management Plan 	<ul style="list-style-type: none"> Define Shutdown-Start-up Schedule Define Detail Schedule incl. projects Integrale Schedule 	<ul style="list-style-type: none"> Follow-up Integrale Schedule 	<ul style="list-style-type: none"> Analyse Actual Schedule against Baseline 	
Resources	<ul style="list-style-type: none"> Define Resource Management Plan Set-up TA Scope Organisation Kick-off meeting Define TA-Roles 	<ul style="list-style-type: none"> Set-up TA Planning Organisation Plan Planning Resources 	<ul style="list-style-type: none"> Set-up TA Execution Organisation Plan Execution Resources Define Training Requirements Define Infrastructure Plan Kick-off meeting 	<ul style="list-style-type: none"> Set-up TA Close-Out Organisation Plan Close-Out Resources 	<ul style="list-style-type: none"> Set-up TA Scope Organisation Kick-off meeting 	
Integration	<ul style="list-style-type: none"> TA Management Plan Review Lessons Learned 	<ul style="list-style-type: none"> Approve TA Management Plan 	<ul style="list-style-type: none"> Scope Change approvals Create Workpermits 	<ul style="list-style-type: none"> Execute Scope Scope Change approvals Adminster Work Permits 	<ul style="list-style-type: none"> Close Out report incl. Lessone Learned Benchmark conducted 	
Stakeholders	<ul style="list-style-type: none"> Define Stakeholder management plan Identify Stakeholders Stakeholder list Plan Engagement 	<ul style="list-style-type: none"> Update Stakeholder list Plan Engagement Manage Engagement Monitor Stakeholders 	<ul style="list-style-type: none"> Update Stakeholder list Plan Engagement Manage Engagement Monitor Stakeholders 	<ul style="list-style-type: none"> Update Stakeholder list Plan Engagement Manage Engagement Monitor Stakeholders 	<ul style="list-style-type: none"> Update Stakeholder list Plan Engagement Manage Engagement Monitor Stakeholders 	
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↑ Previous

24

Knowledge Area's

Next ↓

Deliverables per TA Project Phase and Knowledge Area

↑ Previous

25

Knowledge Area's

Next ↓

		Preparation Phase	Scoping Phase	Planning Phase	Execution Phase	Close-out Phase
Cat. 1	-12					
Cat. 2	-10					
Cat. 3	-18					
Scope		<ul style="list-style-type: none"> • Preliminary Scope + Capex Projects • Define Scope Management 	<ul style="list-style-type: none"> • Gatekeeping • Technical Task Clarification • Scope Freeze 	<ul style="list-style-type: none"> • Prepare Scope + Capex Projects workpackages • Tagging completed 	<ul style="list-style-type: none"> • Prepare Scope Changes • Punch list 	<ul style="list-style-type: none"> • Punch List closed • As-built documentation completed • Preliminary Scope next TA
Schedule		<ul style="list-style-type: none"> • Milestone Schedule 	<ul style="list-style-type: none"> • Milestone Schedule • Baseline Management Plan 	<ul style="list-style-type: none"> • Define Shutdown-Start-up Schedule • Define Detail Schedule incl. projects • Integrale Schedule 	<ul style="list-style-type: none"> • Follow-up Integrale Schedule 	<ul style="list-style-type: none"> • Analyse Actual Schedule against Baseline
Resources		<ul style="list-style-type: none"> • Define Resource Management Plan • Set-up TA Scope Organisation • Kick-off meeting • Define TA-Roles 	<ul style="list-style-type: none"> • Set-up TA Planning Organisation • Plan Planning Resources 	<ul style="list-style-type: none"> • Set-up TA Execution Organisation • Plan Execution Resources • Define Training Requirements • Define Infrastructure Plan • Kick-off meeting 	<ul style="list-style-type: none"> • Set-up TA Close-Out Organisation • Plan Close-Out Resources 	<ul style="list-style-type: none"> • Set-up TA Scope Organisation • Kick-off meeting
Integration		<ul style="list-style-type: none"> • TA Management Plan • Review Lessons Learned 	<ul style="list-style-type: none"> • Approve TA Management Plan 	<ul style="list-style-type: none"> • Scope Change approvals • Create Workpermits 	<ul style="list-style-type: none"> • Execute Scope • Scope Change approvals • Adminster Work Permits 	<ul style="list-style-type: none"> • Close Out report incl. Lessons Learned • Benchmark conducted
Stakeholders		<ul style="list-style-type: none"> • Define Stakeholder management plan • Identify Stakeholders • Stakeholder list • Plan Engagement 	<ul style="list-style-type: none"> • Update Stakeholder list • Plan Engagement • Manage Engagement • Monitor Stakeholders 	<ul style="list-style-type: none"> • Update Stakeholder list • Plan Engagement • Manage Engagement • Monitor Stakeholders 	<ul style="list-style-type: none"> • Update Stakeholder list • Plan Engagement • Manage Engagement • Monitor Stakeholders 	
...						

Too late Started
!!!

Deliverables per TA Project Phase and Knowledge Area



Deliverables per TA Project Phase and Knowledge Area

		Preparation Phase	Scoping Phase	Planning Phase	Execution Phase	Close-out Phase
		-26	-24	-18	0	0
Cat. 1		-20	-18	-12	0	0
Cat. 2		-14	-12	-8	0	0
Scope	<ul style="list-style-type: none"> Preliminary Scope + Capex Projects Define Scope Management Plan 	<ul style="list-style-type: none"> Gatekeeping Technical Task Clarification Scope Freeze Initiate Scope Change 	<ul style="list-style-type: none"> Prepare Scope + Capex Projects workpackages Tagging completed 			<ul style="list-style-type: none"> Punch List closed As-built documentation completed Preliminary Scope next TA
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Deliverables per TA Project Phase and Knowledge Area

↑ Previous



How to Proceed now!

Giving all the things needed for a successful TA how can we make the best out of it giving the time left over and the set conditions.

What are the options
Define



What is the status:
Measure



What can we use:
Analyse

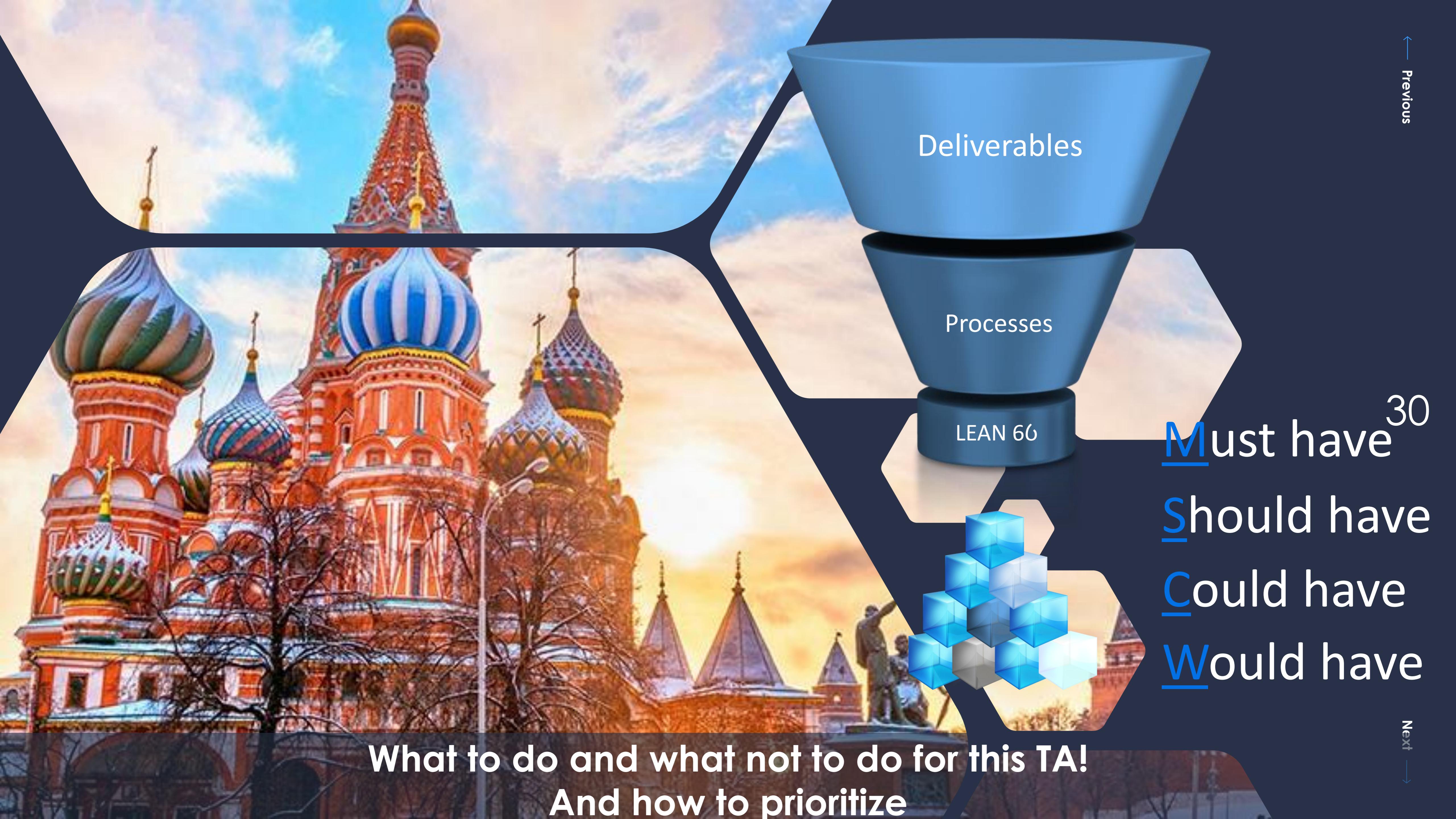


What can we develop
Improve



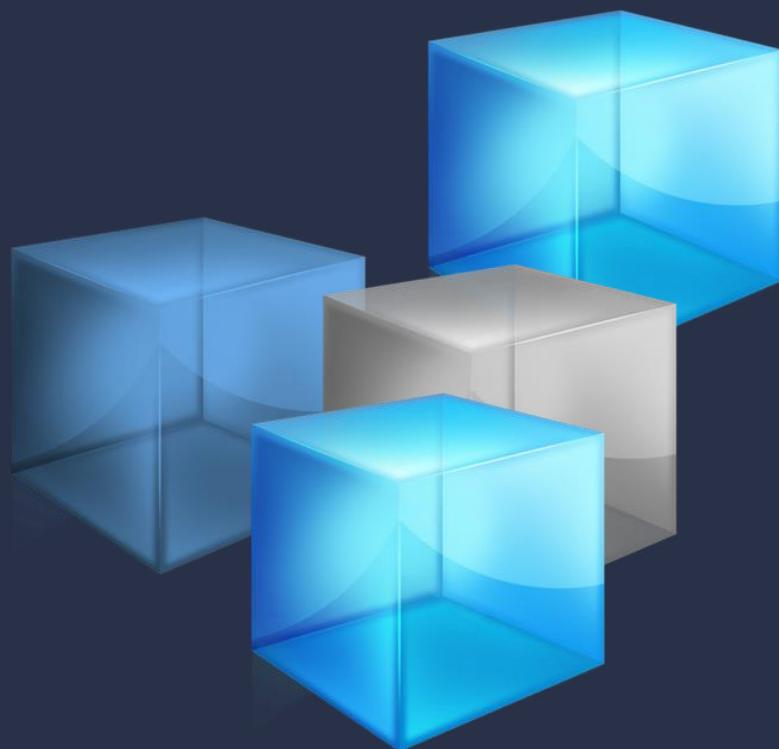
Is it working
Monitor



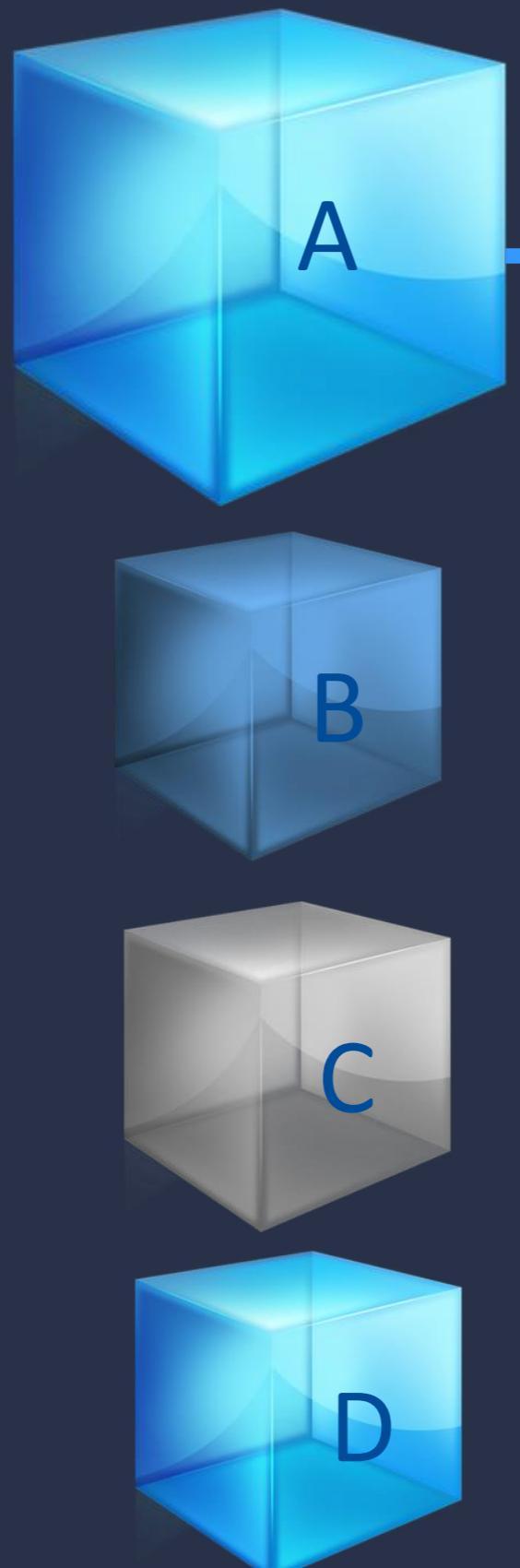


What to do and what not to do for this TA!
And how to prioritize

All Deliverables we selected to do



Prioritize



Divide
Smaller partitions

If you think you MIGHT have an idea, but you aren't really sure, then this is your chance to really dive into the subject and see what you can find.

Giving a public talk is your chance to research a topic.



We have to Speed up deliverance

An example

01

Scope definition



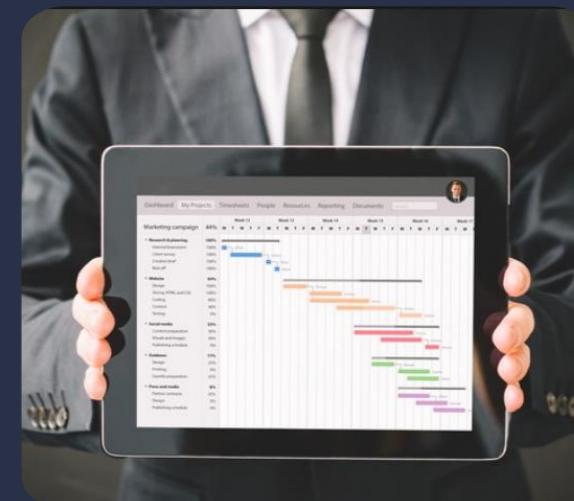
02

Planning

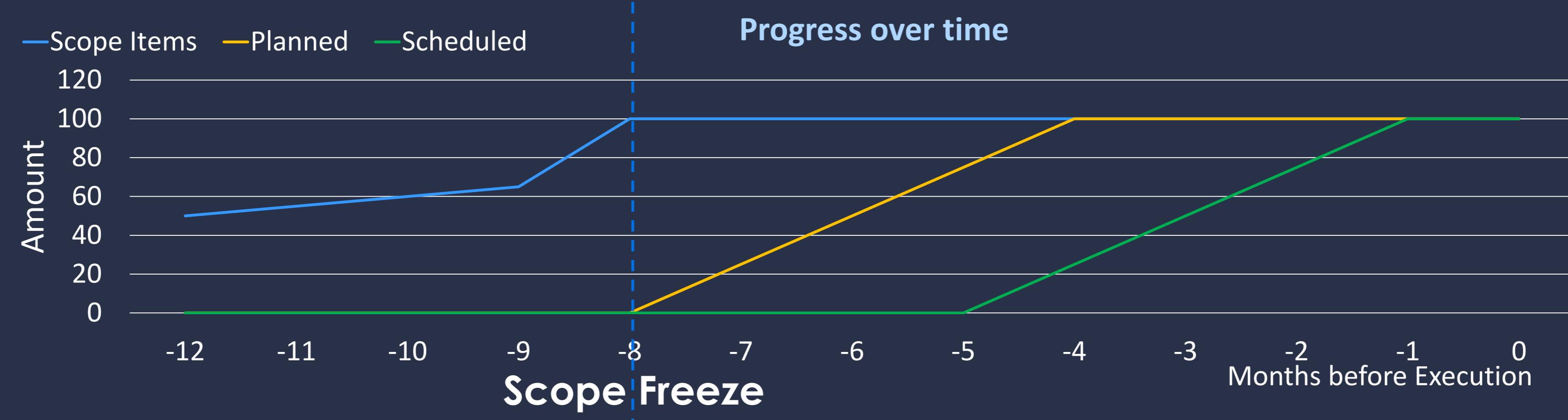


03

Schedule

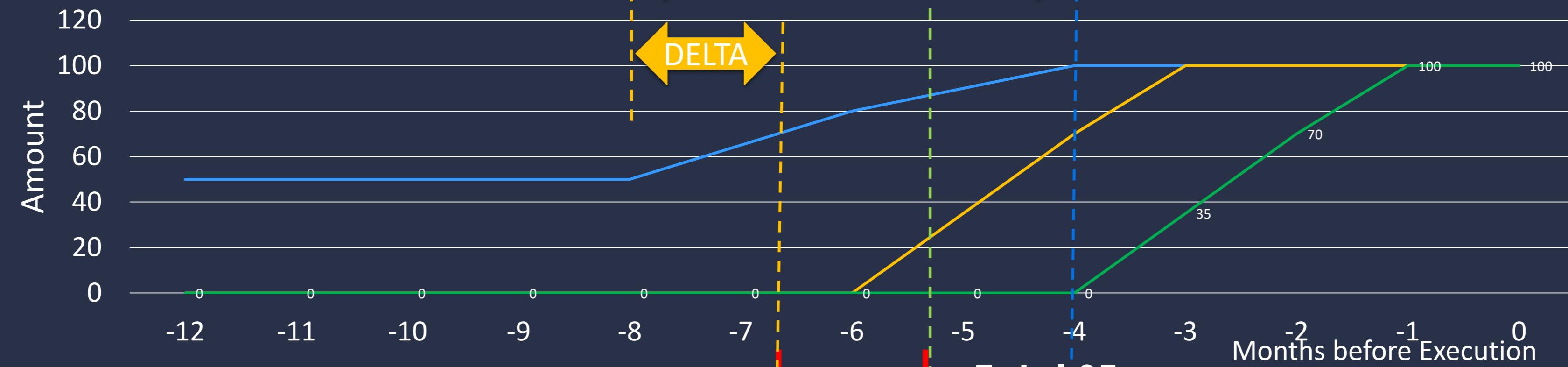


Normal Waterfall



33

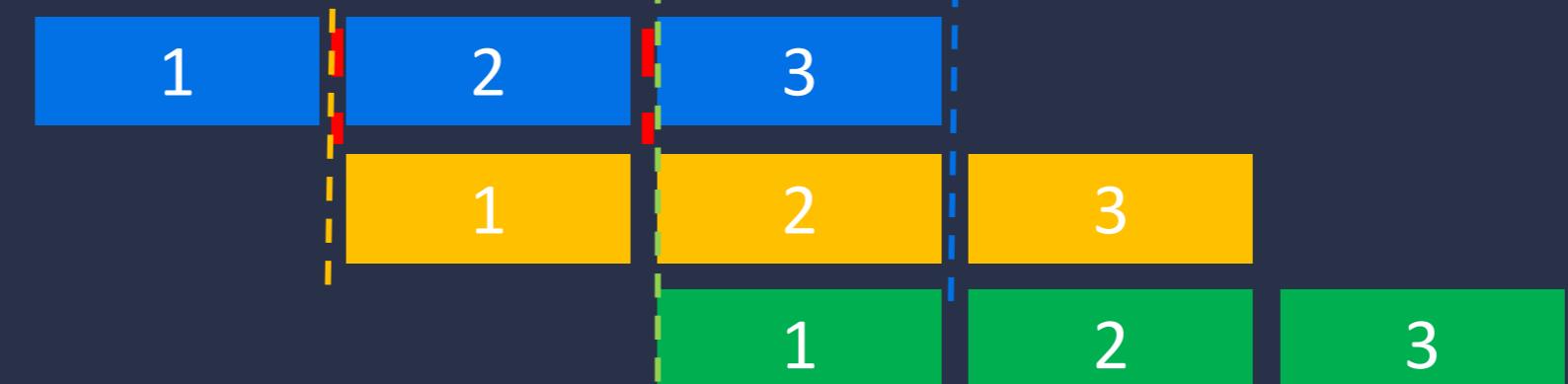
Agile Waterfall



Continuously prioritize for example per System and/or Process Instrumentation Diagram

- Critical Systems
- Critical Path
- Long Lead Materials needed
- Projects

SF-1 SF-2 Total SF



Next

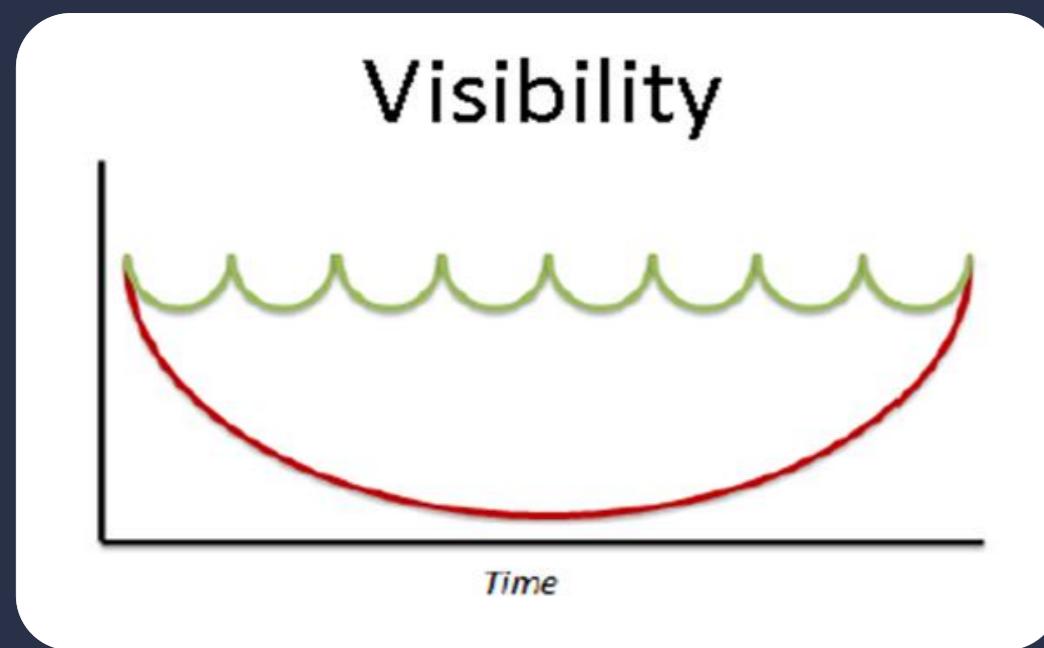
How does everything now comes together and works

↑ Previous

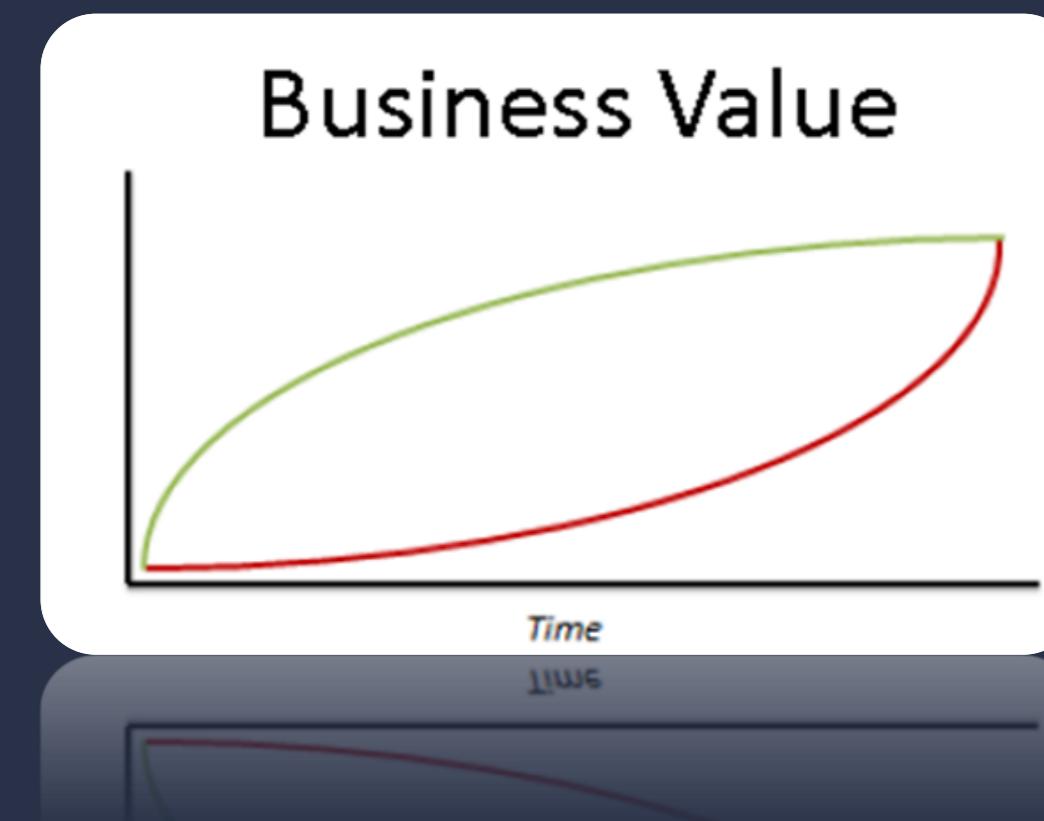


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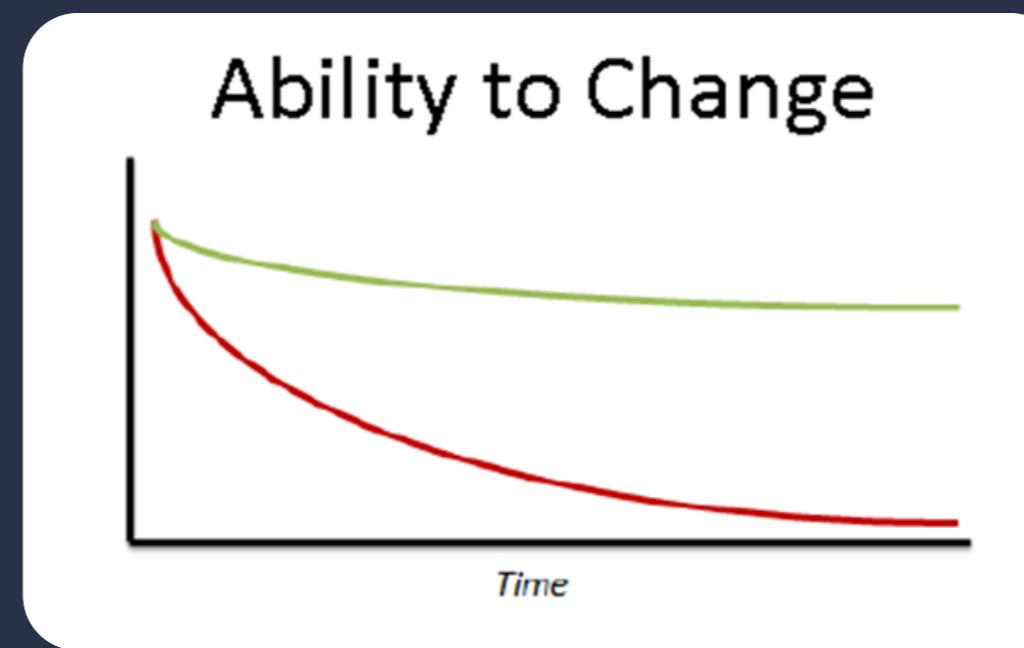
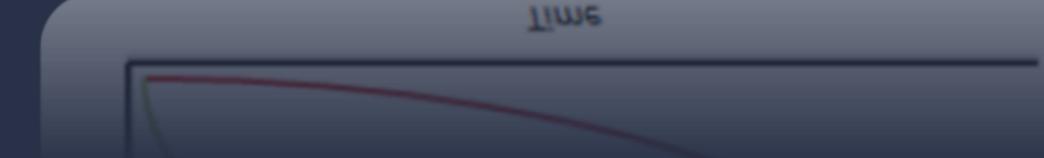
Agile versus waterfall



Visibility
Providing transparency



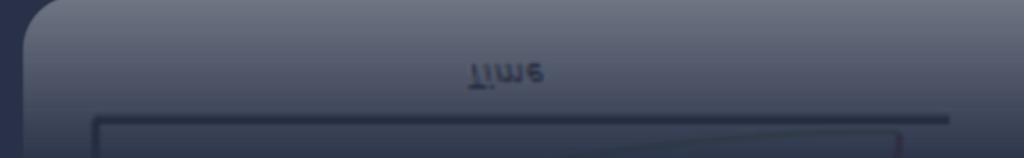
Business Value
Deliver early from the start



Ability to Change
Easy to adapt when requirements change

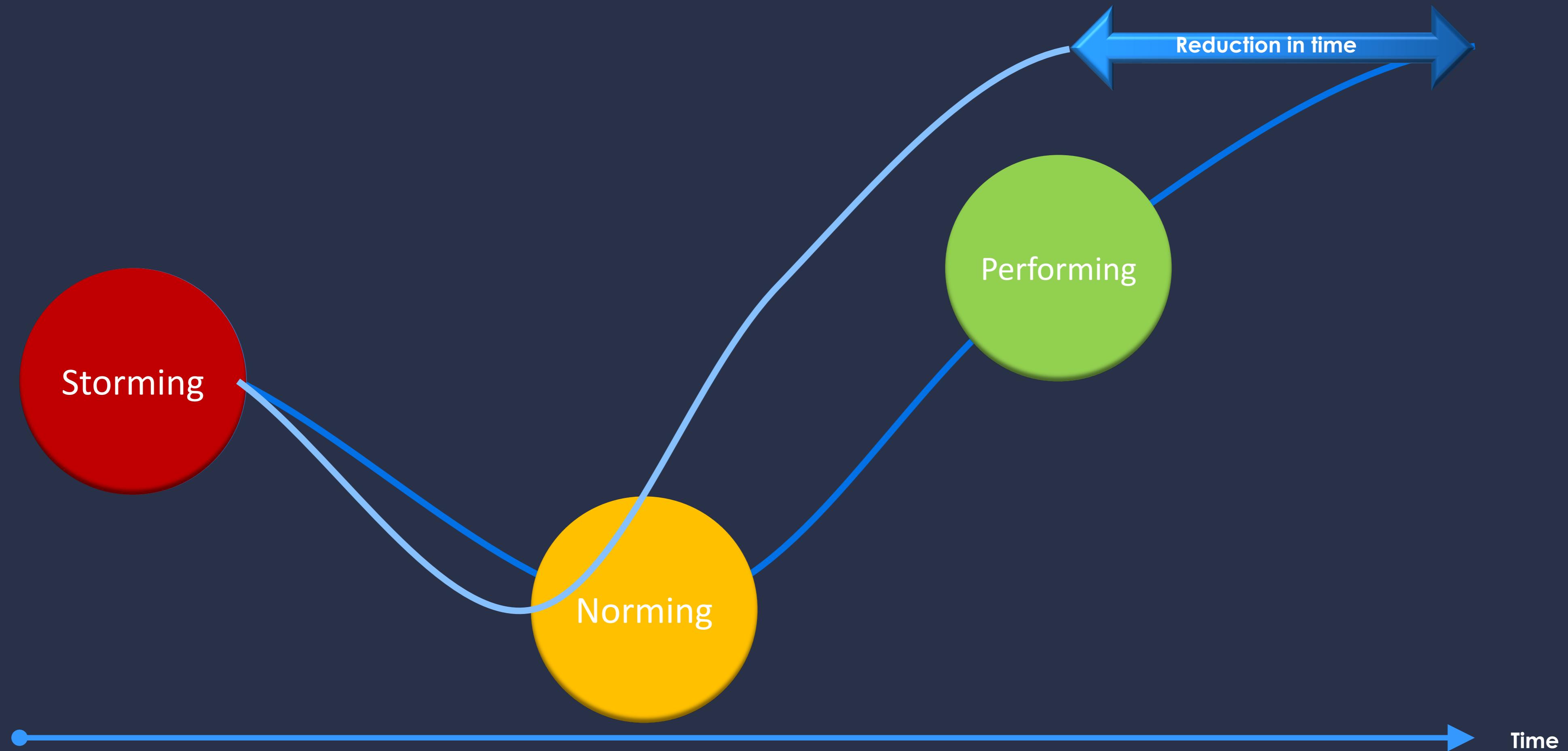


Risk
Lower risks by getting earlier insight on critical scope, schedule, materials, costs and quality



Team development

Tuckman's Model



36

Next
↓

↑ Previous

Team development

EVERYBODY THE SAME TEAMWORK

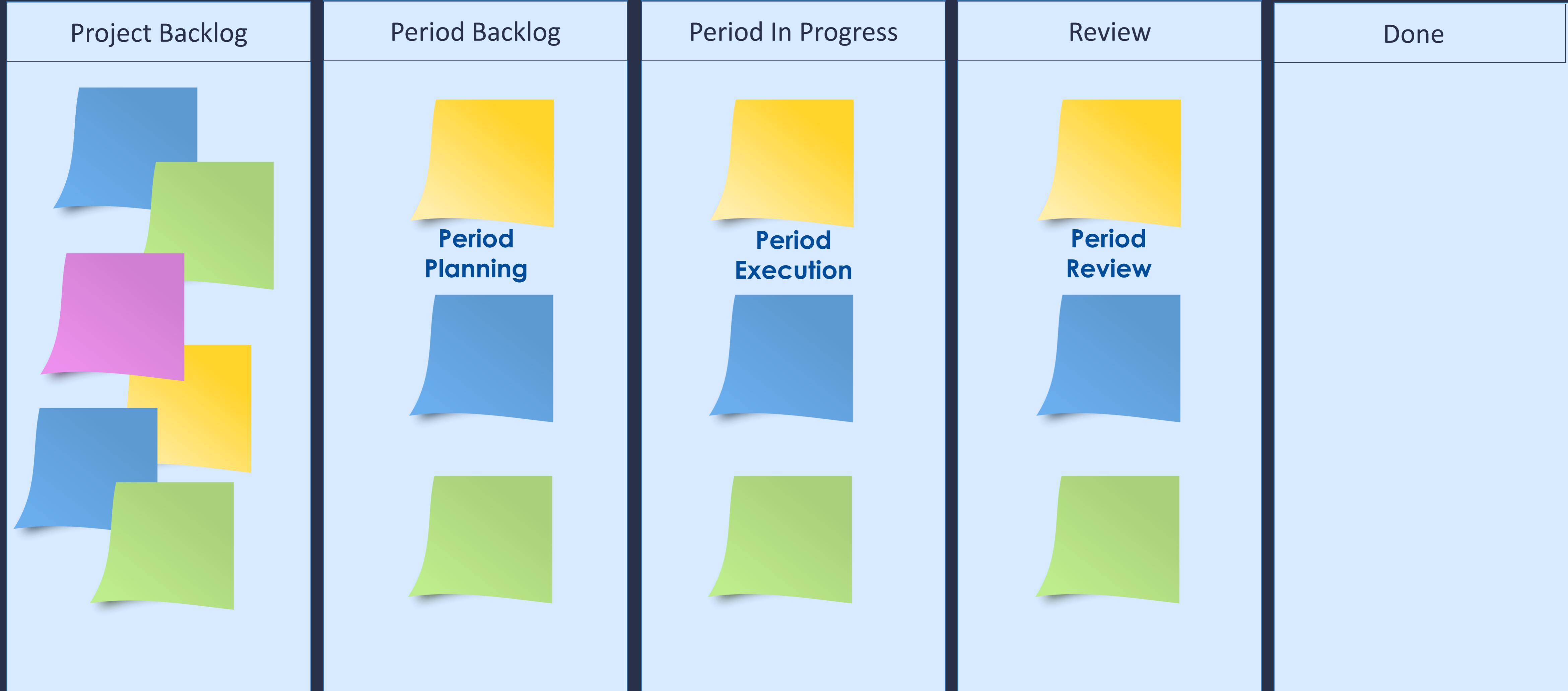
FAST FEEDBACK

SHARING KNOWLEDGE
OVERALL INTEGRATION
OPEN COMMUNICATION
DIRECTION

SHARING EXPERIENCE

STRICT DISCIPLINE
PERSONAL DEVELOPMENT
LEARN FROM EACH OTHER
HIGH INDEPENDENCY
UP TO DATE STATUS
NEW METHOD NEW EXPERIENCE
SHARING KNOWLEDGE

Tool for Communication: To Do, Doing and Done



KANBAN Board (example look at Trello.com)

↑ Previous

38

Next ↓

Our 12 Principles of TA-Agile

Satisfy the Client

Collaborate daily

Regularly Reprioritize deliverables

Motivated individuals

Deliver deliverables frequently

Face-to-face conversation

Measure of progress through ready deliverables

Promote sustainable work methods

Continuous attention to technical excellence

Simplicity is essential

Self-organizing teams

Regularly reflect on continuous improvements

Conclusion from this Story



Does it make sense to you?

Can you understand the points told?



Do the points connect?

Do they flow together?

Are there any gaps?

Are there places where you got lost?

40

**Agile together with Waterfall as a Hybrid can work,
especially if it is not clear what must and can be done in a given time period**

**Using Lean Six Sigma helps
to choose, prioritize, develop, improve and speed up work processes and deliveries**



The Best Stories ARE TRUE

I hope you liked it and learned something from this story



Expertise Manager
Turnarounds & Projects

For more information

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