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Class

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"Iteration Management: Unclogging Your Development Process"

Presented by:

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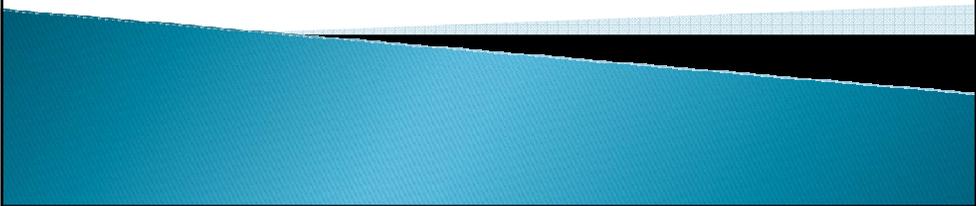
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Tiffany Lentz

An author, mentor, coach and trainer of agile methodologies, processes, and practices, **Tiffany Lentz** is a senior consultant and project manager with ThoughtWorks, a global IT services firm focused on end-to-end software delivery. She has worked extensively for large clients in the US, Canada, and China, helping them transform their organizations to incorporate agile practices and enhance their efficiency and delivery processes. She is the author of the Iteration Management chapter in the ThoughtWorks anthology book and believes that the iteration manager's job is to build a well-oiled delivery machine.

Petra Skapa

Petra Skapa is a leading practitioner of agile transformation programs, with broad international experience helping companies transition to an agile model. She has worked as a developer, iteration manager, project manager, coach, and Chief Agilist with companies ranging from Fortune 100 to boutique consultancies, across numerous industries. Petra believes that iteration manager is a crucial role in agile transformations and lies at the heart of successful iterative development.

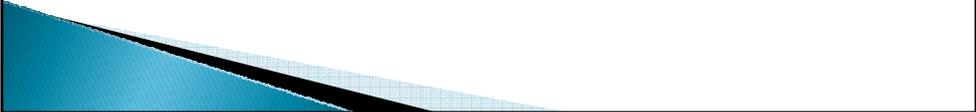


**Iteration Management:
Unclogging Your Development Process**

Tiffany Lentz & Petra Skapa
November 2009

Goal of Today's Session:

To enable you to fill the role and responsibilities of an Iteration Manager, 1st with the correct mindset and then with the right tools



What you'll hear about

- ▶ IM Tutorial – See for yourselves
- ▶ What is an Iteration Manager?
- ▶ Measuring progress & bad smells

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Exercise

- ▶ Teams are made up of: 1 Customer, 1 BA/QA, 1 Iteration Manager, 2 Developers
- ▶ You will be developing wire frames as your “code”.
- ▶ Iteration 1
 - 10 Minutes to run the Iteration Planning Meeting
 - 10 Minutes to run the Iteration
 - 5 Minutes to run the Showcase
- ▶ Iteration 2
 - 5 Minutes to run the Iteration Planning Meeting
 - 10 Minutes to run the Iteration
 - 5 Minutes to run the Showcase
- ▶ Iteration 3
 - 5 Minutes to run the Iteration Planning Meeting
 - 10 Minutes to run the Iteration
 - 5 Minutes to run the Showcase
 - Project Update meeting (Presenting progress report and forecasting time to complete)

Pause and Reflect

- ▶ What did the IM do?
- ▶ What COULD the IM have done?
- ▶ What does this mean for your team?

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What is an Iteration Manager?

1. Mindset
2. Value
3. Organizational Placement
4. Skills
5. Responsibilities & tasks

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Iteration Management is...

Iteration Management is inwardly facing and acutely focused on the iteration production line; facilitating a smooth and continuous stream of high quality, high priority, production ready functionality at a sustainable pace

Iteration Management is...

Iteration Management is **inwardly facing** and acutely focused on the iteration **production line**; facilitating a smooth and **continuous stream** of high quality, high priority, **production ready** functionality at a **sustainable** pace

Mindset:

- ▶ Build and relentlessly tune
- ▶ Facilitate, enforce and defend
- ▶ Keep the 'values' of agile
- ▶ Prevent and Eliminate

Iteration Managers see the iteration as the heartbeat of the Agile process and believe Agile teams are self governing in nature

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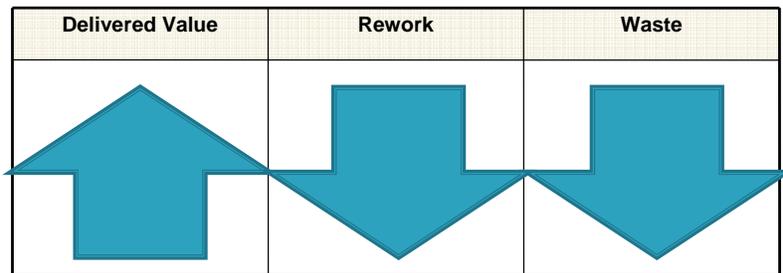
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Value:

Increase Throughput defined as

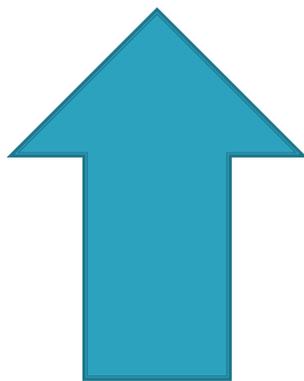
$$\text{Throughput} = \text{Delivered Value} - (\text{Rework} + \text{Waste})$$

Measured by...



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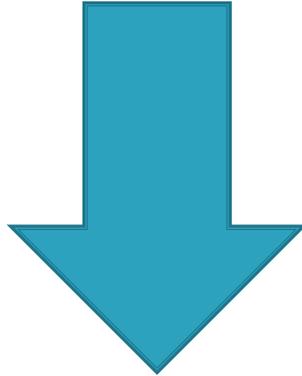
Delivered Value:



- Velocity
- Story Points delivered
- Business value per slice, per release, per point
- Delighted customers and team members
- Cost per point

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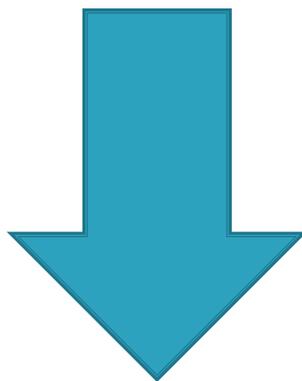
Rework:



- Bugs (TDs)
- Roll backs
- Shared services impact

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Waste:



- Time a story is on the board
- Blockers
- Unplayable stories under active development
- % time spent on stories
- Consistency velocity ratio

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Facilitate a smooth and continuous stream of high quality, high priority functionality at a sustainable pace

At close of day one – only a few tasks are completed

Confidently delivering highest sustainable throughput each iteration

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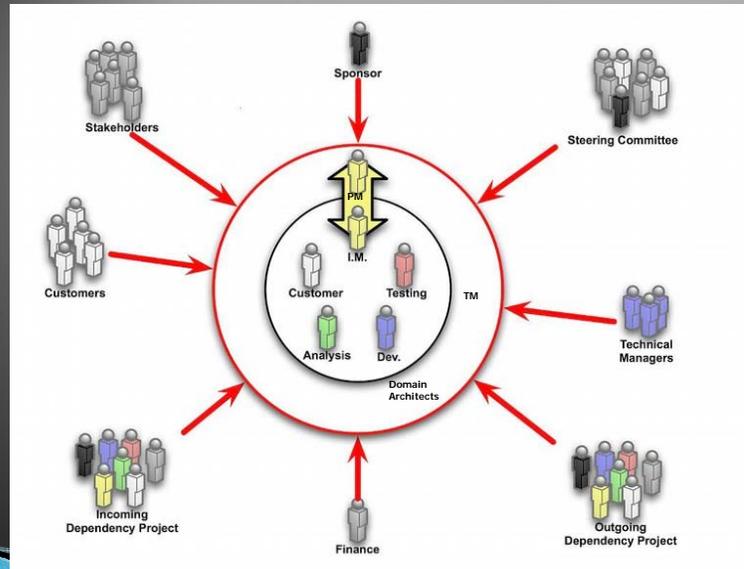
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What is an Iteration Manager?

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In the organization?



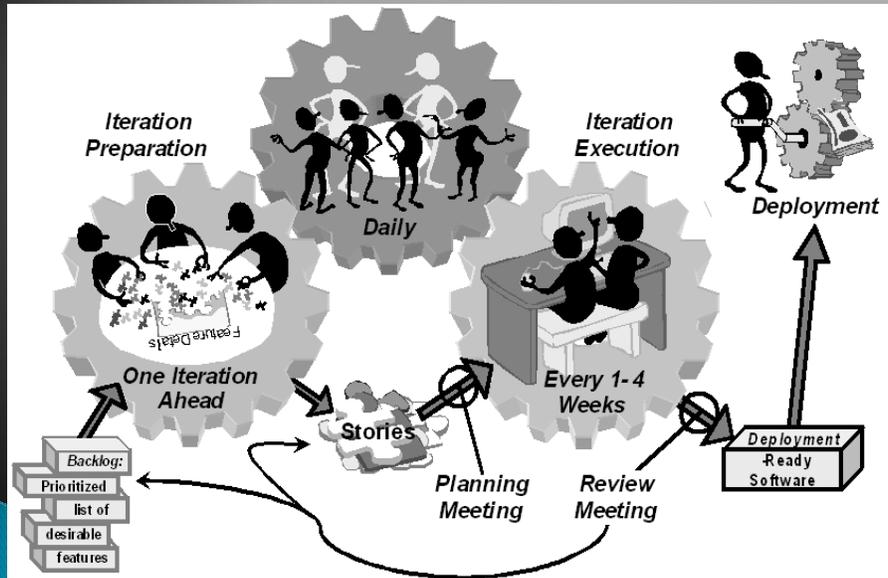
Source: Robin Gibson

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Project Team Leadership Roles

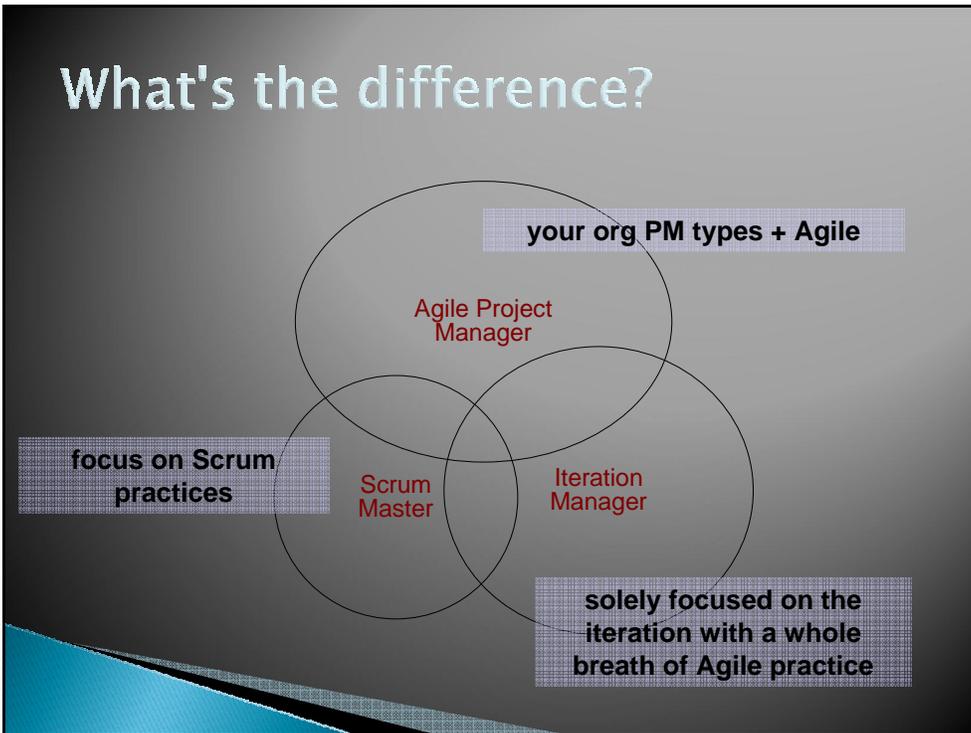
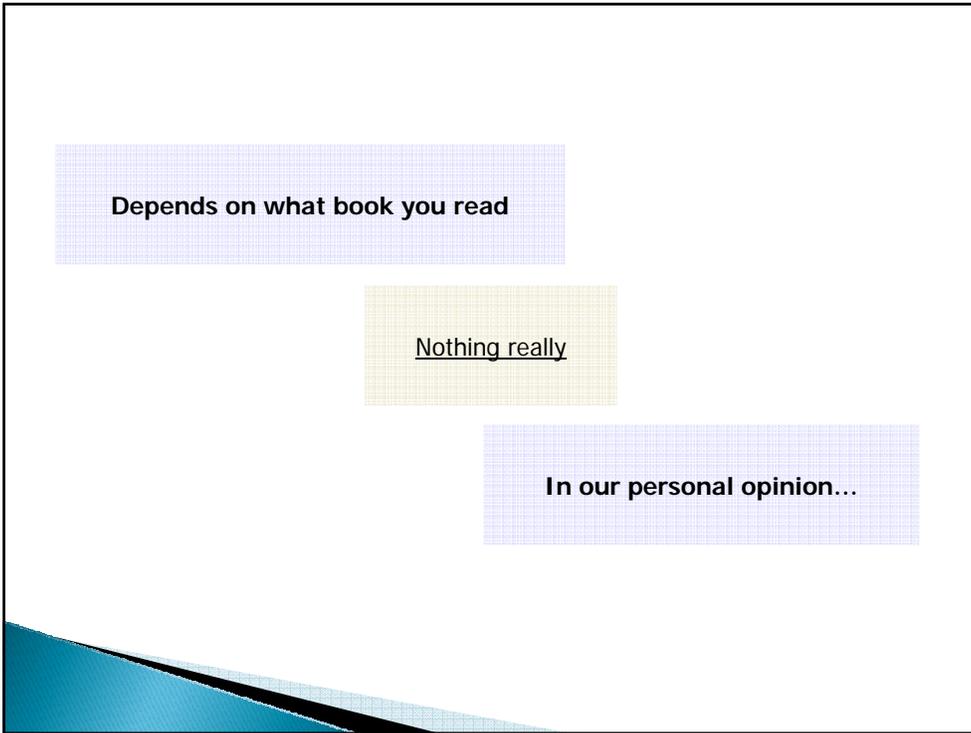
Facilitates, enforces and *defends the iteration delivery	Manages project; on time, on budget in scope	Accountable for the technical quality of the solution being delivered	Defines and communicates the business vision and value, ensures it meets customer & business needs
Iteration Manager	Project Manager	Technical Lead	Customer
<ul style="list-style-type: none"> ■ Iteration focus ■ Story and iteration goal completion ■ Unblock, manage and escalate blockers ■ Iteration planning ■ Open/close iteration ■ Collect iteration metrics ■ Manage iteration flow; capacity ■ Facilitate iteration retrospectives ■ Advocates for customer and developer bill of rights 	<ul style="list-style-type: none"> ■ Project focus ■ Budget & cost forecast ■ Project Release ■ Open/Close project ■ Project/program level reporting ■ External integration ■ Cross project coordination ■ Risk/issue mgmt ■ Project retrospective 	<ul style="list-style-type: none"> ■ Defines technical vision ■ Authors technical stories ■ Code quality & QA strategy ■ Works with customer to prioritize stories ■ Ensure code quality ■ Technical resource planning ■ Provides leadership to dev/qa ■ Signs off on technical story completion 	<ul style="list-style-type: none"> ■ Define business solution ■ Identify business opportunities ■ Authors business stories ■ Priority and play order of business stories ■ Responds to IT team real time ■ Signs off on story completion ■ Ensure product is instrumented to measure feature impact and engagement ■ Define & manage business readiness

In Project Development?



So what's the difference?

Iteration Manager
Agile Project Manager
Scrum Master



What is an Iteration Manager?

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The Skill Set – 6 Attributes

1. Responsible
2. Humble
3. Collaborative
4. Committed
5. Influential
6. Knowledgeable

Source: Mike Cohn: 6 attributes of a Scrum Master

The Skill Set – 6 Attributes

1. Responsible

- ▶ Responsibility for the team's adoption and practice of Agile
- ▶ Provide real-time guidance and leadership

2. Humble

- ▶ Willing to do whatever is necessary to help the team achieve its goal
- ▶ Recognize the value in all team members and by example lead others to the same opinion

3. Collaborative

- ▶ Beyond modelling a collaborative attitude, establish collaboration as the team norm

Source: Mike Cohn: 6 attributes of a Scrum Master

The Skill Set – 6 Attributes cont'

4. Committed

- ▶ Does not always require a 8 hr/day commitment, it does require someone in the role who is fully committed to it
- ▶ Must feel the same high level of commitment to the goals as team members
- ▶ Should not end very many days with impediments raised by the team that are left unaddressed

5. Influential

- ▶ Exert influence without command-and-control
- ▶ Influence the team to give Agile a fair trial or to behave more collaboratively

6. Knowledgeable

- ▶ Methodology, technical awareness, market, or specific knowledge to help the team in pursuit of its goal

Source: Mike Cohn: 6 attributes of a Scrum Master

Skills required for the role of an Iteration Manager include:

- ▶ **Leadership**
- ▶ Attention to detail
- ▶ Understanding of technical issues
- ▶ **Communication**
- ▶ Ability to creatively resolve issues
- ▶ Team work and ability to thrive in a collaborative environment
- ▶ **Ability to see trends and uncover potential issues/roadblocks**
- ▶ Ability to learn quickly
- ▶ Proficiency with MS Excel and other iteration tracking tools.
- ▶ Personnel Management and Conflict Resolution

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Fundamental Responsibilities

1. Communicate with your team
2. Track iteration/story progress
3. Communicate the "status" of the iteration
4. Seek, understand & resolve iteration issues
 - Theory of constraints
 - strong as your weakness link
5. Ensure discipline of Agile practices

Task Level Responsibilities

1. "Communicate with your team"

There are too many to name all...

- ▶ Constantly, collaboratively, and fearlessly
- ▶ What did you do yesterday, today, blockers?
- ▶ Find that one-on-one time
- ▶ Build and motivate the team
- ▶ Manage the conflicts
- ▶ Retrospectives
- ▶ Etc.

Task Level Responsibilities

2. "Track *iteration/story* progress"

There are too many to name all....

- ▶ Create and update the story card wall
- ▶ Be acutely aware of issues and risks
- ▶ Ensure cards are playable and "gateable"
- ▶ Protect the iteration from new stories
- ▶ Talk to individuals to get good information
- ▶ Resolve issues for stories in the iteration
- ▶ Etc.

Task Level Responsibilities

3. Communicate the "status" of the iteration

- ▶ Make the invisible visible
 - big visible charts
- ▶ Stand ups, open closes
- ▶ Metrics & bad smells
- ▶ Stakeholder agreements and open channels
- ▶ Discuss trends and early warning signs openly
- ▶ Can you walk by the project space and "see" the status?
 - See when the project is trending to completion?
 - The blockers?
 - The work in progress?
 - The vision?
- ▶ Etc.

Task Level Responsibilities

4. Seek, understand & resolve iteration issues

- ▶ Acutely aware of impediments
- ▶ Proactive
- ▶ Solve the root cause
- ▶ Theory of constraints
- ▶ Fine tune constantly
- ▶ Use your metrics
- ▶ Etc.

Task Level Responsibilities

5. Ensure Discipline of Agile Practices

- ▶ Constant reinforcement
- ▶ Call out when team “rights” are violated
- ▶ Flexibly adopt a cadence for the team – “iterate” until you get it right
- ▶ Fix things only when they’re broken
- ▶ Be courageous in your organization
- ▶ Fail fast
- ▶ Solve problems/address trends collectively
- ▶ Team morale and work load
- ▶ Etc.

More task responsibilities... too many to count

- › Identify areas of Agile Practices where external support maybe required
- › Set up card walls and organize the space for putting up user stories and related information
- › Provide input on resource requirements
- › Prepare for and Lead all Iteration scope meetings – Iteration Planning meetings, Iteration Kick offs, Iteration Close outs, Daily Standups and Retrospectives
- › Facilitate Estimation sessions with a variety of estimation techniques with focus on consistency
- › Prepare Project Inception and kickoff activities
- › Manage release scope and ensure any potential impact to the release timeline is communicated to the stakeholders appropriately
- › Promote team building
- › Ensure that the team is working on the highest priority user stories
- › Understand the issues being faced and resolve those issues – seek PM/Sponsor support as required
- › Track story progress – Calculate team Velocity, Create charts to demonstrate iteration progress
- › Make changes to the story backlog as required – adjust priority, estimates, change status of user stories etc
- › Identify trends and early warning of issues
- › Communicate the "status" of the iteration to the team detailing out the progress made, issues resolved since last update and pending issues with action items.
- › Manage scope of the iteration and ensure there is no scope creep
- › Understand if the iteration may have an impact to the schedule and communicate the same to upper management
- › Identify risks and be able to create mitigation plan for each identified risk
- › Identify opportunities to increase the productivity of the team
- › Assist the team in working fast while maintaining sustainable speed
- › Collect code quality metrics and communicate them on a daily/iteration basis
- › Keep the project related documentation like Story backlog and various metrics up to date on Plane

What you'll hear about

- › IM Tutorial – See for yourselves
- › What is an Iteration Manager?
- › **Measuring progress & bad smells**

Iteration Metrics Must Haves

- ▶ Team velocity – how much was done
 - Can average by role; points per dev
- ▶ Total scope, scope completed
 - In some measurable form; points
 - Can break down into types of points
- ▶ Trend to a completion date
- ▶ Business value delivered
 - Can be hard to do by story
- ▶ Code quality metrics
 - Code coverage, build times, complexity.

Measure The Bad Smells

- ▶ If something doesn't seem right, measure it, trend it, apply a change, watch for change
- ▶ 3 step process:
 - Hypothesis
 - Measure
 - Change

Bad smell metric examples

- ▶ How often the team gets impacted by production issues? (The devs were on call to resolve issues)
 - Measure: Non- 100% dedicated team
- ▶ How often is the environment unavailable to check in?
 - Measure: How often are being checking in?
- ▶ Team constantly missing target velocity
 - Measure: Velocity volatility or Load Factor
- ▶ Stories take longer than planned
 - Measure: Estimation accuracy
- ▶ “Too many” defects found after the iteration; staging, release, production
 - Measure: amount of churn between dev and QA
- ▶ Customer concerned about time spent on certain features
 - Measure: Cost per story point

A Word of Caution

- ▶ Know your audience
- ▶ Know when to say when
- ▶ Measure your successes, too!

Is an IM really that important?

We value the whole team taking responsibility but recognize that ownership and accountability of leadership roles is key to effecting change

Before you say no... understand the risks...

Without an IM...

IM Responsibility	Without It
Acutely focused on real time iteration team progress and impediments	Up to ten fold decrease in resolution time, directly impacting business deliver
Tracks team progress and innovates new measure	Root cause issues not identified or actionable Late awareness does not allow for correction
Coaches the team and enforces Agile best practices	Lack of discipline, decrease in quality, team and customer confusion, lack of trust
Facilitates iteration activities, promoting team participation and ownership	Lack of accountability and ownership, great inconsistency across the organization
Constantly encourage open feedback	Issues left un attended, alignment and trust degradation, low innovation, wasted/idle time
Escalates to various roles and channels	Issues not resolved, longer response times, hierarchy promotes decreased self organization
Courage to say no, protect Agile practices to ensure quality delivery	Degradation of processes, quality decreases due to deadline stress, technical debt, burn out
Accountable for providing the team iteration clarity	Decrease team productivity, not delivering on highest priority, burn out
Raises the alarm, early and often	Up to ten fold decrease in resolution time, directly impacting business deliver Late awareness does not allow for correction

To sum it up....

The Right Skill Set, The Right Mind Set

