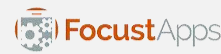# PROJECT RESCUE 9-1-1

How to fix a project before it burns to the ground

Code PaLOUsa is made possible in part by these awesome sponsors!

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Experience

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Outline

What is going to be covered?

✓ Why listen to me
My project background

✓ Goals
The goals of the presentation

✓ The Project
Example project

✓ Early Warning Signs
Identifiable issues which you can look for to determine a problem may arise.

✓ Causes
What are root causes of issues?

✓ Approaches
What approaches can you take to remediate issues?

Why listen to me?

4 **FOUR YEARS**
Spent the last 4 years firefighting projects.

PLAYED MANY ROLES
Been a developer, team lead, architect, and manager.

MANY SUCCESSFUL PROJECTS
And a few which were not successful.

Goals

Understand

What are the **CAUSES** of the issues we identified?

Anticipate

What are the **EARLY WARNING SIGNS** of trouble in your project?

Approaches

With identified issues and defined causes, what **APPORACHES** can remediate these issues?

The Project

Calculation Project

TIMELINE

Mandated Start Date

Estimates Predict Overrun

Missing Estimates

CALCULATION

Main Business Value

Compare 2 Numbers

Focus on Correctness

BUDGET

Fixed Budget

TEAM

Team Already Established

All Roles Filled

EARLY WARNING SIGNS

"Anticipate the difficult by managing the easy."- Lao Tzu

Issue: Team Dynamics

"The most important single ingredient in the formula of success is knowing how to get along with people." – Theodore Roosevelt

DISHARMONY

POISION PILL

OWN AGENDA

DON'T SOCIALIZE

Issue: Poor Communication

"The art of communication is the language of leadership." - James Humes

BORING MEETINGS
People present ideas in meetings, but never get any feedback.

NEGATIVITY
The team is always negative, everyone shoots down ideas immediately. Individuals are snarky, sarcastic or passive aggressive.

NOT US
Most of the conversations between team members include language like "YOU" and "THEM".

Issue: Slipping Estimates

The Team

Is Not Able

To Meet

Estimates

Almost Done
Team members tell you multiple times they are "Almost Done", "80%" and have no blocking issues. This work lasts the entire iteration.

Standups
Every standup has people working on the same task with an expectation to be finished tomorrow, only to hear about the same item during standup the next day.
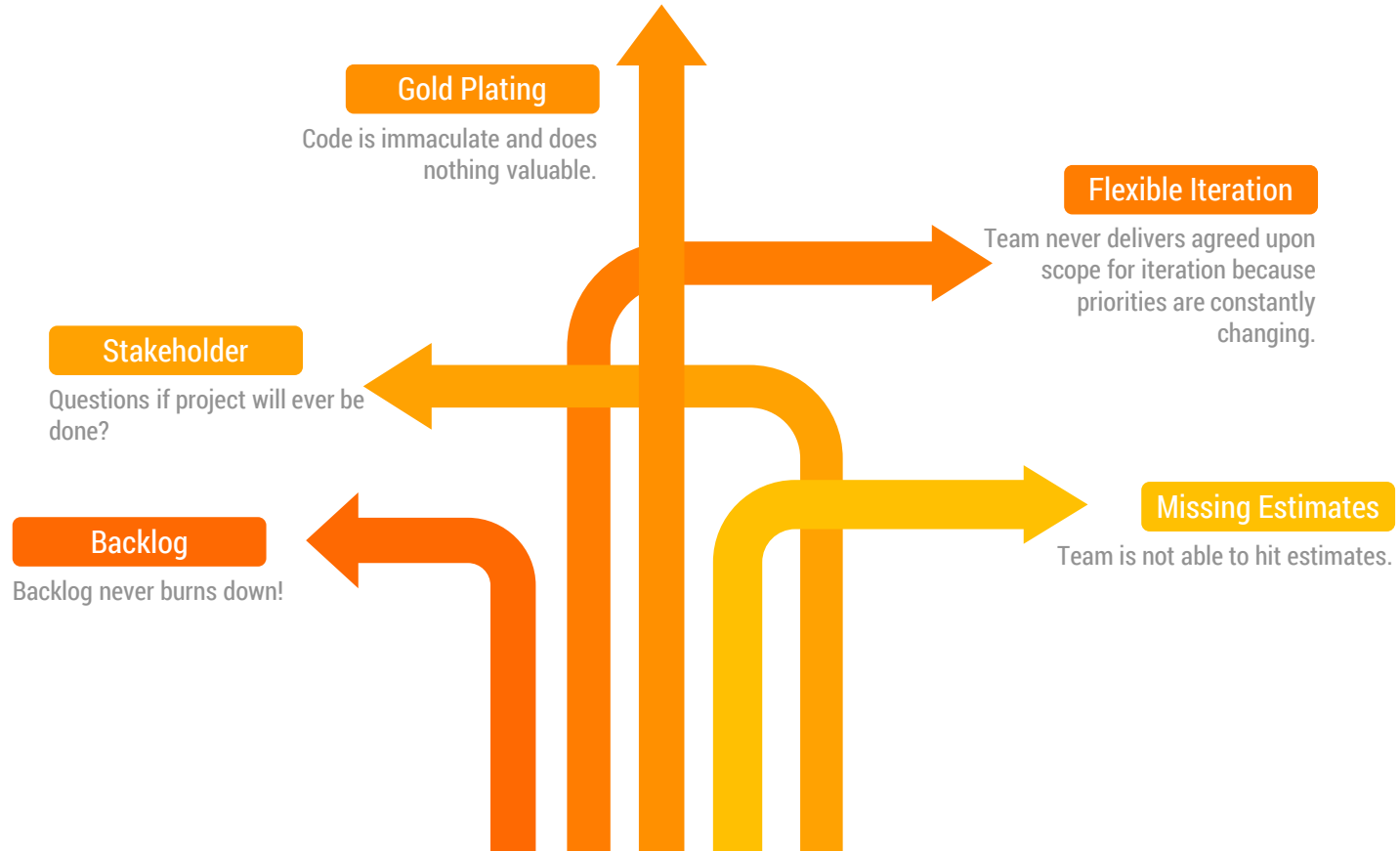
Never Hit the Mark
Estimates are NOT accurate, but your team should show you a distribution of meeting estimates.

Scope Carried Over
Iterations end with many pieces and parts of the scope being carried over.

Issue: Scope Management

"Deciding what not to do is as important as deciding what to do."-Steve Jobs

Gold Plating

Code is immaculate and does nothing valuable.

Flexible Iteration

Team never delivers agreed upon scope for iteration because priorities are constantly changing.

Stakeholder

Questions if project will ever be done?

Missing Estimates

Team is not able to hit estimates.

Backlog

Backlog never burns down!

Issue: Lack of Shared Vision

Integration Fails
Everyone builds their parts, but it takes a long time to integrate.

Plumbing Built
Have built logging, authentication, data access, but business users are not excited because there is nothing to test.

Shared Vision

Big Picture
Team cannot answer questions about how their work contributes to the goal of the iteration or the goals of the project.

No Business Value
At the end of an iteration, all of the work is done but there is nothing to demo to the stakeholders.

Issue: Project Tracking is Off
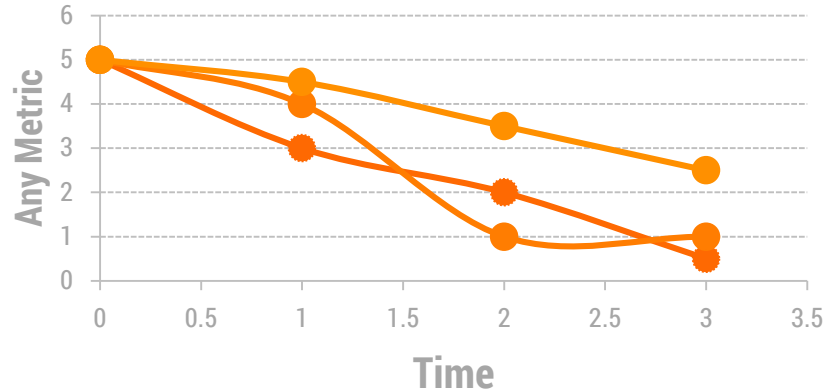
NOT HITTING THE MARK

Team is not able to meet daily, weekly or iteration scheduled tasks.

TRACKING

Unable to predict where the project is because don't have accurate information.

NEVER NEGATIVE

People have a natural inclination not to provide negative information.

ART & SCIENCE

Project management is a mix of art and science. When one overshadows the other, we have a problem.

Issue: Frustrated Stakeholders

? **WILL IT EVER END**
Asking if the project will ever end?

NOT INTERESTED IN FEATURES
Stakeholders are not interested or impressed by the features team is delivering.

LACK OF PROGRESS
Frustration at lack of progress.

CAUSES

"Every cause produces more than one effect." – Herbert Spencer

Cause: Maslow's Hierarchy of Needs

"What a man can be, he must be. This need we call self-actualization!" - Abraham Maslow

Self-Actualization
Morality, **Creativity**, **Problem Solving**, Acceptance of Facts.

Esteem
Self-Esteem, Confidence, Achievement, Respect of Others, Respect by Others.

Love/Belonging
Friendship, Family, Intimacy, Part of Group

Safety
Security of Self, Employment, Resources, Family, Health, Property.

Physiological
Breathing, Food, Water, Sleep
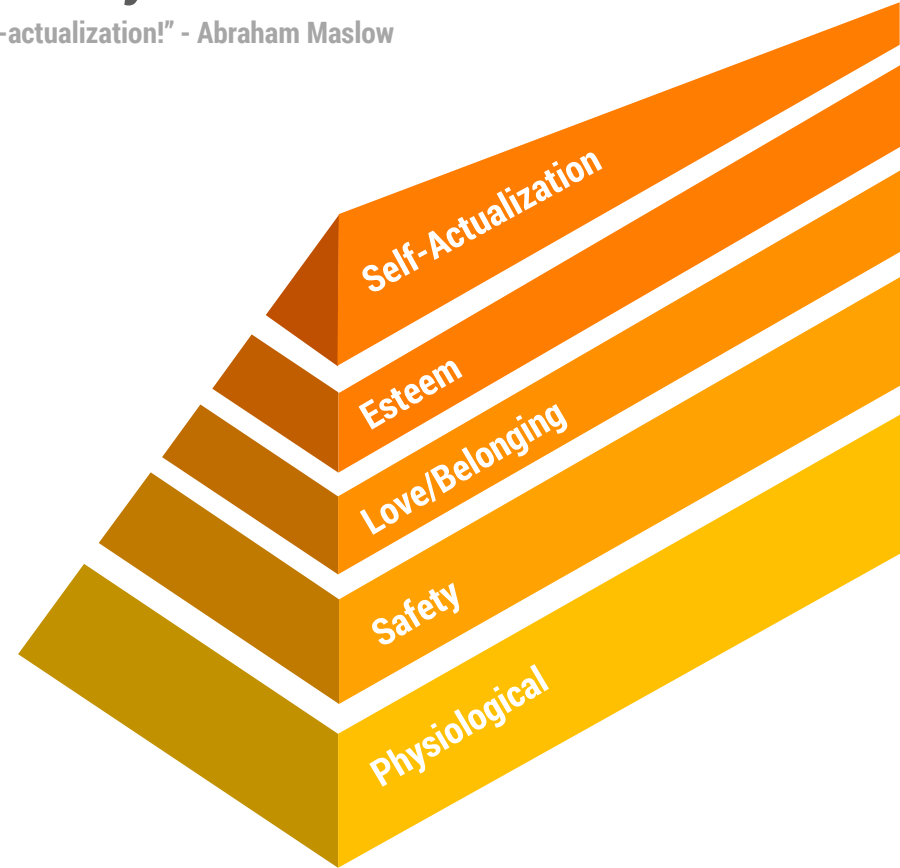
Cause: Five Dysfunctions of a Team
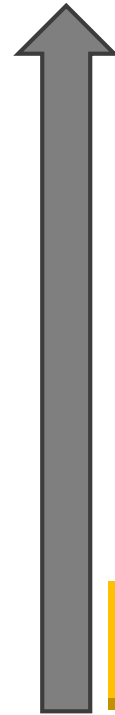
Patrick Lencioni

Inattention to
Results

Avoidance of
Accountability

Lack of
Commitment

Fear of
Conflict

Absence of
Trust

Cause: Absence of Trust

"Trust is the foundation of teamwork!" – Patrick Lencioni

Vulnerability

People who are able to admit the truth about themselves do not to engage in the kind of political behavior which wastes everyone's time and energy. Showing vulnerability is difficult due to self-preservation.

Leader Goes First

A team will never exhibit vulnerability-based trust if the leader does not show the group his/her limitations.

Share Ideas

Without vulnerability-based trust, people will not express their true ideas for fear of being judged harshly.

Cause: Fear of Conflict

"Conflict is neither good nor bad. Properly managed, it is absolutely vital." – Kenneth Kaye
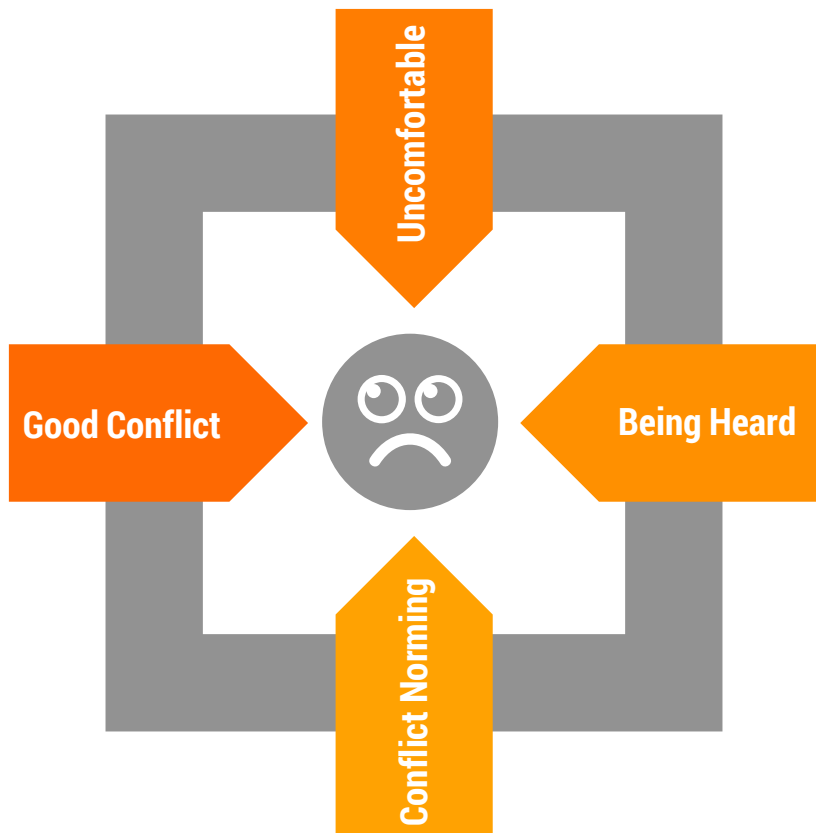
Good Conflict
Requires trust and is all about engaging in unfiltered and passionate debate around issues.

Uncomfortable
Conflict among team members may become uncomfortable at times.

Being Heard
Without constructive conflict, people will not believe their opinions are truly heard.

Normalizing Conflict
As a team, set ground rules for how to engage in conflict.

Cause: Lack of Commitment

"Mediocrity's easy, the good things take time, the great need commitment."- Bob Seger

Buy-In

Commitment is NOT consensus! It IS about individuals buying in to a decision precisely when they don't agree.

Commit to Purpose

Ensure the team is not only committed to tactical decisions but also to the purpose and goals of the project.

Clarity

Requires teams to avoid assumptions and ambiguity, and end with a clear understanding about the decisions.

Cascading Communications

Once commitments are made, ensure relevant team members are notified of decisions.

Cause: Avoidance of Accountability

"A culture of accountability makes a good organization great and a great organization unstoppable. "- Henry Evans

Peers Keep Each Other Accountable

The best accountability occurs directly amongst peers.

Leaders Must Confront Issues

A culture of accountability must include a leader demonstrating the willingness to confront difficult issues.

Best Time During Meetings

The best time to hold other accountable is during meetings.

Cause: Inattention to Results

Prioritize Team Results
To avoid distractions, team members must prioritize results of the team over individual results.

The Results
A true measure of a great team is accomplishing the **results** they set out to achieve.

Make it Public
To remain focused, teams must publicly state their desired results and keep them visible.

APPROACHES

"You must change your approach in order to change your results." – Jim Rohn

Approach: Move

"If you spend too much time thinking about a thing, you'll never get it done." – Bruce Lee

Decisions
What is the cost of working to ensure you are not making a poor decision? Make a decision, move in that direction, assess and adjust.

Prioritize Risk
What are the parts of the project which could cause the most impact if they are not solved? Prioritize those items.

Business Value Star
Make creating business value your guiding star. If the project were cancelled today, what could the business use to derive value?

Approach: Risk Based Priority

Business Risk
Which areas of the system will provide the most value to the business?

Schedule Risk
What tasks will take the longest?

Technology Risk
What are the new pieces of technology you don't know how to fit together?

Approach: Gel the Team

"Teamwork makes the dream work..." - John C. Maxwell

Happy Hour

After hours to blow off the steam of the day.

Potluck

Have a day where each team member brings in a dish. Every dish has a back story.

War Room

Place team in a new space with the objective of getting work done.

Team Lunch

Have a weekly or monthly day the team goes out to lunch together. The team that eats together, collaborates better.

Standup Activity

Create a fun activity to do every Friday during standup.

Approach: Communicate

"The biggest communication problem is we do not listen to understand. We listen to reply." – Stephen R. Covey

Show Vulnerability
Team leaders need to show they have strengths and weaknesses, to show team members they can let their guard down.

Normalizing Conflict
Define the expectations for conflict which can be uncomfortable. Set the 'Rules of Engagement' to demonstrate the need for conflict and boundaries for how to express.

Mining Conflict
Seek out opportunities to unearth buried conflict. Don't jump in the stop conflict, let it play out.

Profiling Conflict
Have the team work through profiling exercises to determine how they deal with conflict. Examples: Myers-Briggs & DISC.

Approach: Incremental Goals

"Incremental change is better than ambitious failure…Success feeds on itself." – Tal Ben-Shahar

Report Progress

Track the TASKS and diligently report the progress.

Drive Tasks

Aggressively remove blocking issues.

Assign Tasks

Assign the broken down work to team members. Get commitment from team members.

Break Work Down

A ton of work is required to deliver business value. Begin by breaking work into small pieces which deliver value.
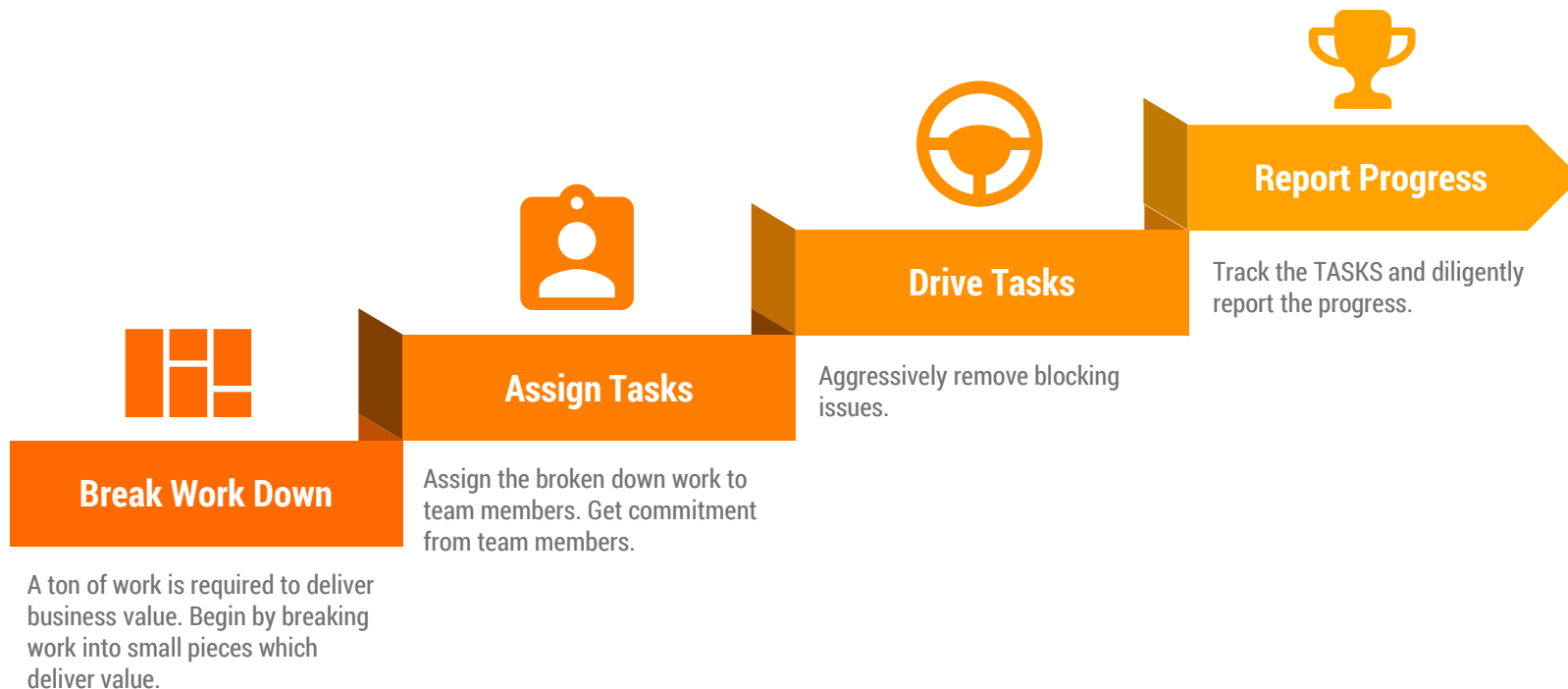
Approach: Connect Tasks to Goals

Greater Than Parts

A team is executing well when their output is greater than the sum of the parts. To achieve this goal, the team must share the same vision.

Create a Map

Create a high level map of how all the pieces fit together. Incorporate team members' feedback. Display the map where it can be referenced to align tasks to goals.

Goal

Shared Mental Model

Foster a shared mental model of the business problem to be solved. Create an ubiquitous language with team and stakeholders. Reinforce precise usage of language.

Align Tasks to Goals

Every task or work item needs to be aligned with its specific objective and associated with the larger goal.

30

Approach: Add People

"Adding manpower to a late software project makes it later."-Fred Brooks

DevOps
Adding people to perform CI/CD tasks only requires them to understand the technologies and deployment strategy.

Work Management
During a large project, there is a body of work around managing work items. You can bring in a person to manage the mechanics of scope moving through the workflow.
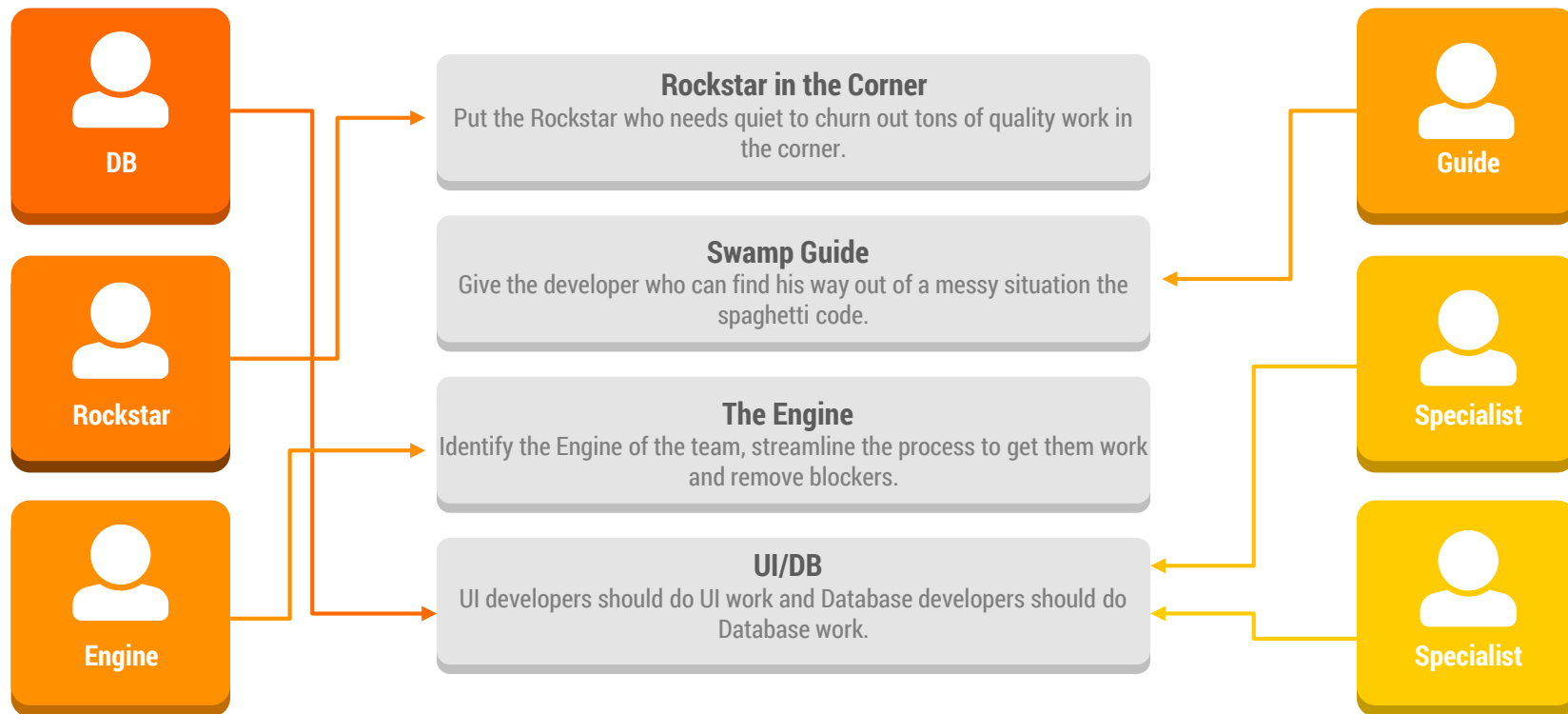
Executing Test Scripts
Regression tests can be a time consuming task, introducing new team members to execute existing test scripts requires less ramp up time and can uncover new issues.

Approach: Align Work Styles

"Focus on your strengths."-Brian Tracy

DB

Rockstar

Engine

Rockstar in the Corner
Put the Rockstar who needs quiet to churn out tons of quality work in the corner.

Swamp Guide
Give the developer who can find his way out of a messy situation the spaghetti code.

The Engine
Identify the Engine of the team, streamline the process to get them work and remove blockers.

UI/DB
UI developers should do UI work and Database developers should do Database work.

Guide

Specialist

Specialist

Approach: Create Specializations

Sub-Team

Have portions of the team focus on core parts of the system or technologies.
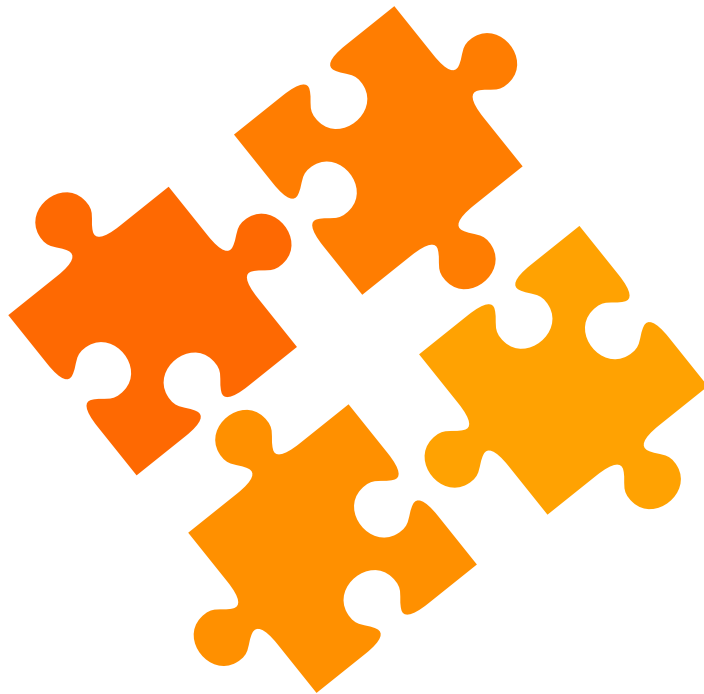
Whole Team

Have the whole team work on the reference implementation of the system to get a general knowledge of all the patterns.

Approach: Communicate With Stakeholders

"The most important thing in communication is hearing what isn't said."- Peter Drucker

Ubiquitous Language

Talk with stakeholders in the business terms they use in their day to day work.

Business Priorities

Present communications in terms of priorities of the business. Deliver scope in those same terms with the same priority.

Show Progress

Generate simple visualizations which allow stakeholders to understand the status of the project.

Address Concerns

Each stakeholder will have different concerns, when communicating with a stakeholder ensure they understand you are addressing their concerns.

Result of Calc Project

Success

Delivered on Time

Team Gelled & Bonded

Some Overtime

Within Budget

Wrap It Up

It is all about the PEOPLE

ISSUES revolved around people

Team Dynamics	**Slipping Estimates**	**Scope Management**
Poor Communication	**Lack of Shared Vision**	**Frustrated Stakeholders**

CAUSES explained people motivations & behaviors

Maslow's Hierarchy of Needs	**Absence of Trust**	**Avoidance of Accountability**
Five Dysfunctions of a Team	**Fear of Conflict**	**Lack of Commitment**
	Inattention to Results	

APPROACHES provided actionable ideas

Create Specializations	**Communicate**	**Connect Tasks to Goals**	
Risk Based Priority	**Incremental Goals**	**Align Work Styles**	**Move**
Gel the Team	**Add People**	**Communicate With Stakeholders**	

References

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