# Being Staff Plus

The Individual Contributor Track

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## Who are you?

- Software Developer for more than 25 years
  - Stuff I care about: Messaging, EDA, Microservices, TDD, XP, OO, RDD & DDD, Code that Fits in My Head, C#
  - Places I have worked: DTI, Reuters, Sungard, Beazley, Huddle, Just Eat Takeaway
- No smart folks
  - Just the folks in this room

### My Staff Plus History

- Been doing Staff Plus roles since 2004
  - We has different names
    - Lead, Architect...
    - But the roles were the same as those we now cluster under Staff Plus
    - (Old roles such as Technical Authority (TA) are also Staff Plus)
  - Principal (Senior) since 2019
  - Been various archetypes (see later)
  - Sometimes had line management responsibilities

BRIGHTER

dme intro tutorial

ials concept



#### Welcome to Brighter

This project is a Command Processor & Dispatcher implementation with support for task queues that can be used as a lightweight library.

It can be used for implementing Ports and Adapters and CQRS (PDF) architectural styles in .NET.

It can also be used in microservices architectures for decoupled communication between the services

GET STARTED

## Agenda

Staff Plus Roles and Archetypes

Moving Beyond Code

**Technical Leadership** 

## The Engineer's Path

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#### Senior or Staff Plus?

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#### Senior is the highest individual contributor role inside a team

- Lowest role where you can opt to remain at that level.

#### Staff is the lowest individual contributor across teams

- Broader technical perspective than within team (local optima)
- Cross-Team Fertilization
- Mentoring
- Design here is architecture: significant change by cost or reasoning

## Staff Plus Archetypes

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Leader: Guides approach and execution of a particular team

Designer: Ensures sustainable architecture via quality attributes

Solver: Digs deep into complex problems and finds the path forward

Messenger: Rides the "architecture elevator" [Hohpe]

You may switch between archetypes as "work on what matters" changes.

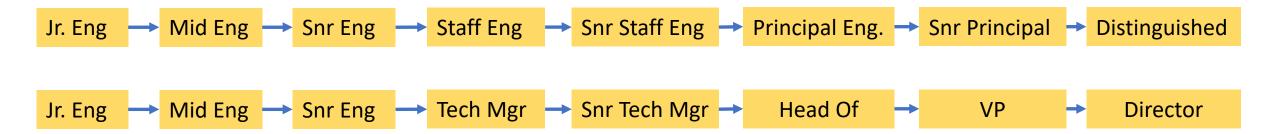
### Manager's Track

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You can switch paths – and move back and forth – though not always at the same level

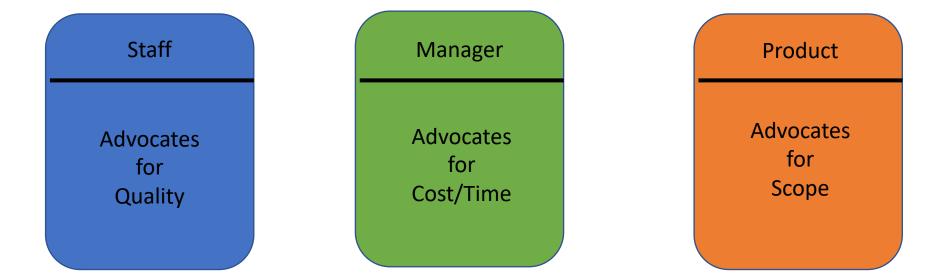
### The Iron Triangle

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The three roles advocate for different aspects of the Iron Triangle – Scope, Quality, Cost/Time

### Scope of the Role

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How

Junior Engineer Execute with Supervision

Senior Engineer
Execute Task with
Supervision

What

Staff Engineer
Requirements to Tasks

Senior Staff Engineer Requirements to Design

Principal Engineer
Own Problems, Generate
Requirements

Distinguished Engineer Find Problems Nothing "Out of Scope"

Yonatan Zunger, https://leaddev.com/leaddev-live/role-and-influence-ic-trajectory-beyond-staff

#### Bad Ideas

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#### Assuming IC and Management Tracks are mutually exclusive

- You can swap between the two tracks.
- You may not be able to swap at the same level without experience.
- You can swap back and forth, often to regularly refresh tech skills.

#### Not having both IC and Management Tracks

- People management should not be the only route beyond senior.

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#### The Four Skill Sets

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Core Technical Skills: Software Engineering

Product Management: Narrative and Strategic Vision

Project Management: Making Sure It Happens

People Management: Find People and Motivate Them

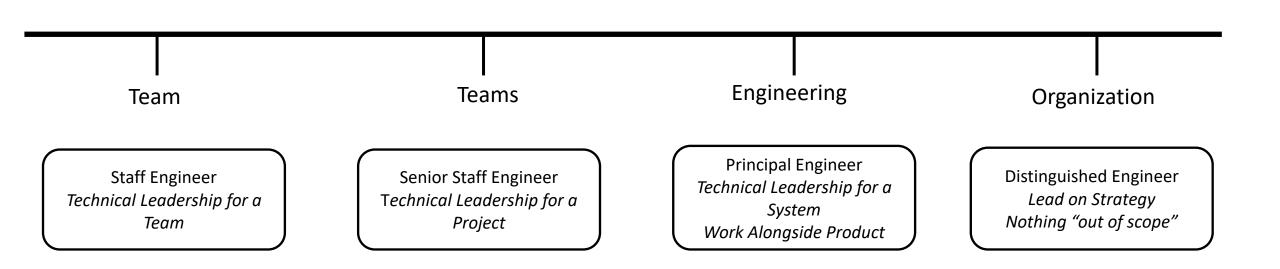
- The more senior you are, regardless of title, the more the expectation you can pivot to any of these roles.
- You can be hyper-specialist, but you won't grow influence across the org which limits how senior you will rise.

### People, Process and Technology

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### Choose Your Shape

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Deep Technical Knowledge

Broad Technical Knowledge

Deep Technical Knowledge



### It Remains A Technical Role

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#### May not make sense to be a "code monkey"

- You will write less code
- If some one else *could* write the code *should* you?

#### How much code?

- Staff Plus Roles might be no more than 20% "working with code"
- Goal is to keep technical skills "fresh"
- Risk of becoming a blocker if you own coding tasks.
- Pair or Mob instead

### How To Keep Coding

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#### Pair Programming

- Avoids Blocking a Team
- You share design skills/experience
- You gain insight

#### Ride Along

- Understand team's experience
- Goal is to look for friction
- Goal is to use new understanding to fix friction

## How To Keep Coding

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#### POC

- Write an example or template
- Solve a common requirement

#### OSS

- Hand Over But Check Back In
- Look for contributors

#### Bad Ideas

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Work on What Matters

Assuming you have to be the best coder in the room

Privilege core skills only

Becoming post-technical

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### Leadership not Management

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#### Leadership not Management

- If you are not a manager, you will not have authority
  - No authority over resources: people and money
  - No authority over road maps
- So you will need to work via influence
  - You share a vision by talking about it.

### You Need A Map

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Who are your key stakeholders?

How does something get done: soup to nuts?

How do ideas get shared? Slides, narratives, miro boards?

Engineering Culture: guilds, AAF, principles, practices, tenets

Org Priorities: Tolerance for Risk, Technical Debt, Rework, Availability, etc.

The Org Chart

The Shadow Org Chart

## Organizational Culture

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Table 3.1 Westrums Typology of Organizational Culture.

Pathological (Power-Oriented)	Bureaucratic (Rule-Oriented)	Generative (Performance-Oriented)
Low cooperation	Modest cooperation	High cooperation
Messengers "shot"	Messengers neglected	Messengers trained
Responsibilities shirked	Narrow responsibilities	Risks are shared
Bridging discouraged	Bridging tolerated	Bridging encouraged
Failure leads to scapegoating	Failure leads to justice	Failure leads to inquiry
Novelty crushed	Novelty leads to problems	Novelty implemented

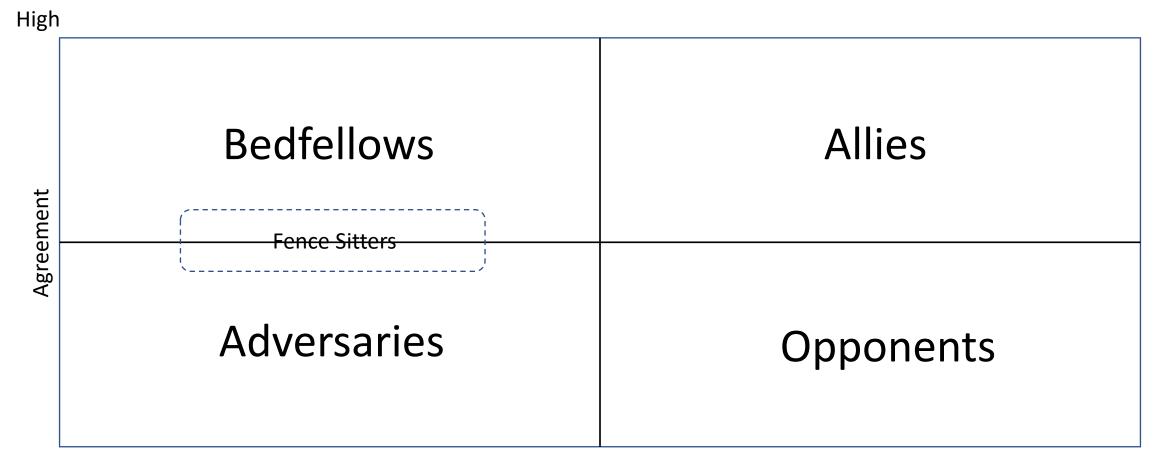
## Yes, Politics

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Work on What Matters



The Empowered Manager Peter Block –

Low

Trust

High 25

### Manage Stakeholders

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#### Establish 1-2-1s with people important to your "getting things done"

- Exchange vision, purpose, goals
- Affirm or negotiate trust
- Affirm or negotiate agreement

### Communicating

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#### Narrative vs Decks

- Presentation Skills vs Content
- Folks may be mis-aligned on what they took away from a deck
- Narratives should still use visuals to support learning styles
- Consider pre-reads

#### Be Iterative and Incremental

- Start: Simple message, smaller audience, faster feedback
- End: Detailed message, wider audience, slower feedback

## Becoming Influential

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#### Visibility

- Speaking: [Internal] Brown Bags, Training [External] UGs, Conferences
- Blogging/YouTube (including micro-blogging)
- Internal Mentoring and Training

#### Networking

- Attend Contact Points: Stand-ups, guild meetings, AAF, All Hands
- 1-2-1 with key stakeholders
  - Create Allies
  - Uncover Problems

### Technical Direction

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#### You Set Technical Direction

- Collaborate: Guilds, AAF, Working Groups, SMEs, Stakeholders
- Establish Principles
- Encourage Practices

### "You Set the Tone"

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### Voice of Experience

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#### Key Values of Experience

- You remain "cool under fire", because you have "seen it all before"
- You understand "trade offs" because you have seen the impact of decisions
- You personal goals rely less on the short term vs. long term
  - Your market value is not the current framework, language etc.

### Noise to Signal

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#### A key part of your role is to pull signal from noise for stakeholders

- Engineering environments have a lot of signals
- Stakeholders may not have the experience/skills to understand them
- Teams may shout loud about their agenda. Local Optima.
  - Your position should give you perspective to be an honest broker
- Stakeholders rely on you to sort the signal from this noise
  - Don't breach trust. Check your own bias with others.

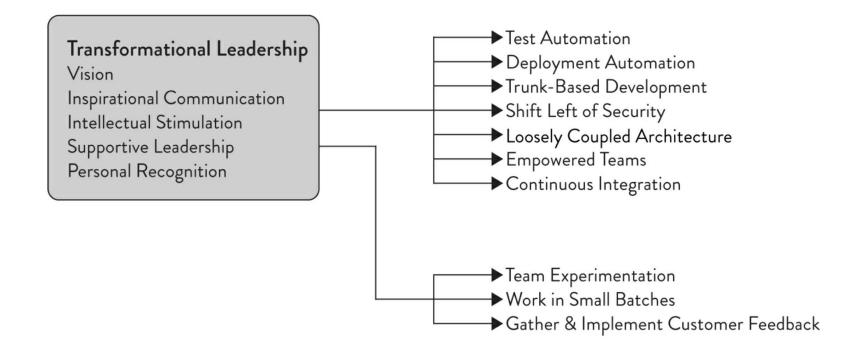
### Transformational Leadership

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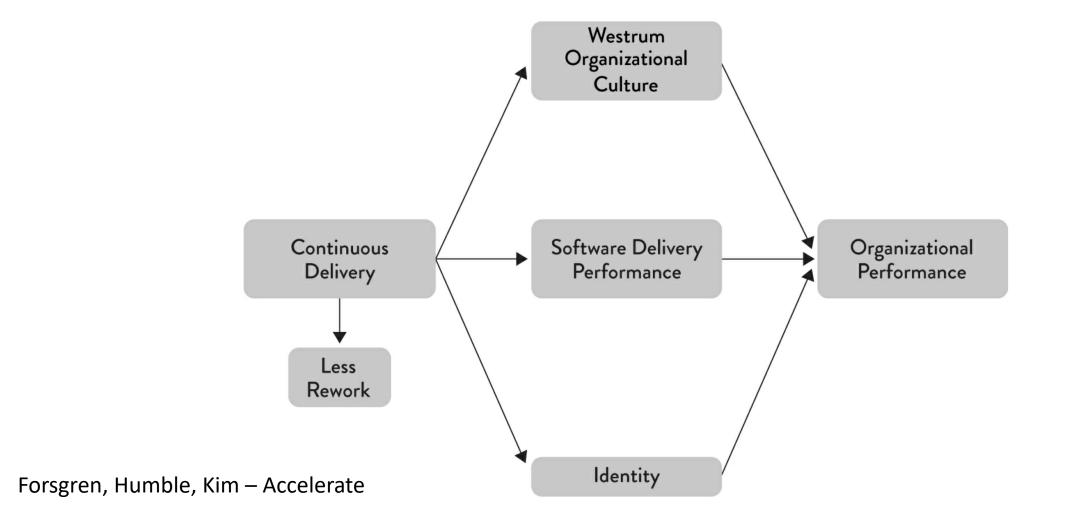
Forsgren, Humble, Kim – Accelerate

### Transformational Leadership

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#### Bad Ideas

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#### Feeling the need to "prove" your technical authority

- Domination through demonstration of your "superior knowledge"
  - You are a leader, not a master
- "Hero" actions on a project marginalize others
  - Your job is to raise them up, not crush them down.
- Assume the room gives you the benefit of the doubt

#### Always speaking first

- Speak last.

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## Demonstrate Impact

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You are expensive, compared to an entry-level hire.

- You will need to *demonstrate* your impact.
- Or you are vulnerable in any cost reduction exercise.

Your role is to tackle the messy, thorny, persistent problems

- The ones everyone recognizes, but no one else can get traction on.
- If anyone could solve it, you don't demonstrate your value.
- Once the problem becomes tractable, move on, but check in.

## The Long View

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#### Your role is to advocate for the long view

Local optima vs. perspective to think "in the large"

#### Use data to validate what you want to work on

- Given limited resources is it the most impactful problem to solve right now

### Build an Architecture Runway

- What planes do you need to land?

## You Set The Agenda

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### Most likely, no one will tell you what your agenda is

- Your manager's role will be to validate your agenda.
- If you look for it, there will be too much to do
- If you are visible, there will be too many requests
- Your manager's role is to give you the context to prioritize.

## Work on Important Things

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Work on What Matters

### Let folks know what you are accomplishing

- Brag Document
- What I am Thinking

#### Deliver

- You will need to deliver high-profile work
- Too much "glue work" won't get you recognition
- What is the most important problem to solve right now!

## Priority Lists

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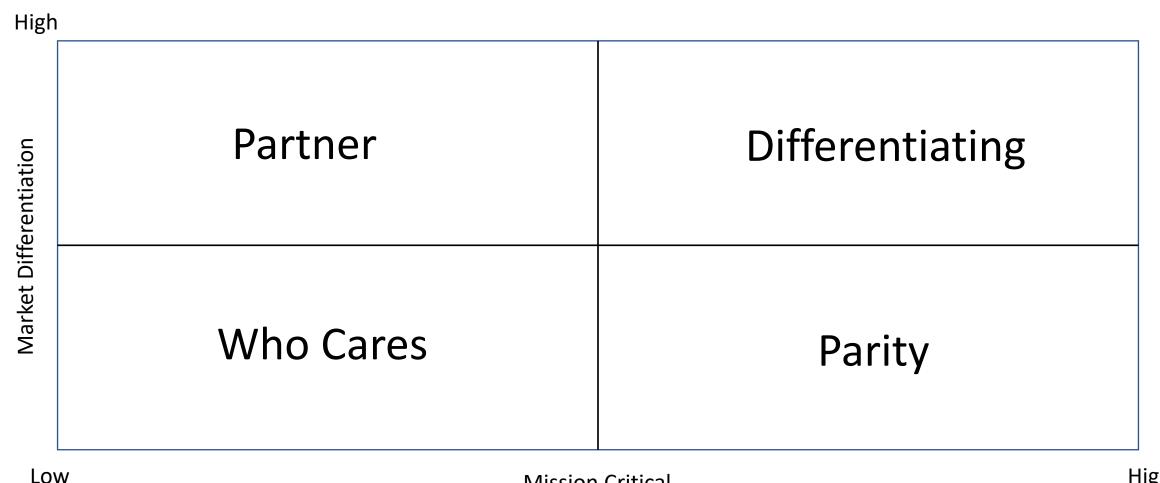
Work on What Matters

### Rank your work according to priority

- Allocate your time according to those priorities
- If your highest priority takes too much time, drop stuff lower down.

## Not All of a System will be Well Designed

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The Purpose Alignment Mde **Neil Nickolaisen** 

### Is It Achievable?

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#### Is your Vision achievable?

- If not, you wasted your time no matter how "right" you are.

### Where possible, make small decisions, repeatedly

- Better to make lots of small decisions because it's easier to correct course.
- It is also easier to sell.
- All successful complex systems started as a simple system and evolved.
- No successful systems ever started as complex

### Customer's Matter

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### Always measure success from your Customers point of view

- If your customers are inside the company this still counts!!
- Without understanding your customer's need, you can't asses importance.

### You Solve Problems

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Does this problem need solving?

- Is anyone already trying to solve it?

**Understand and Explain** 

Make the work simpler and/or easier.

Use influence to gain organizational support

Make an alternative plan.

### Let Others Have Their Trouble

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### You may have the experience to step into many roles

- Let other people step up to do their jobs.
- Will it really *fail* if you don't step in.
- Will the organization learn better from the pain of being allowed failure?
- Is there a more important demand on *your* time?

### Bad Ideas

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Spending all your time on "glue".

Not recognizing that your impact needs to be visible.

- Too much British modesty.
- It's not enough to be virtuous, you need to be seen to be virtuous.

# Agenda

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Work on What Matters