SysAdmins Unleashed!

Jon Geibel | Director of Systems

Ron Johnson | Technology Manager

Walt Disney Animation Studios

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Founded, October 1923

First animated feature, Snow White and the Seven Dwarfs, 1937

Frozen - 53rd Animated Feature

800 artists & engineers in one vertically integrated studio

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Our scale...

30,000 Core Renderfarm

60M Render Hours on Frozen

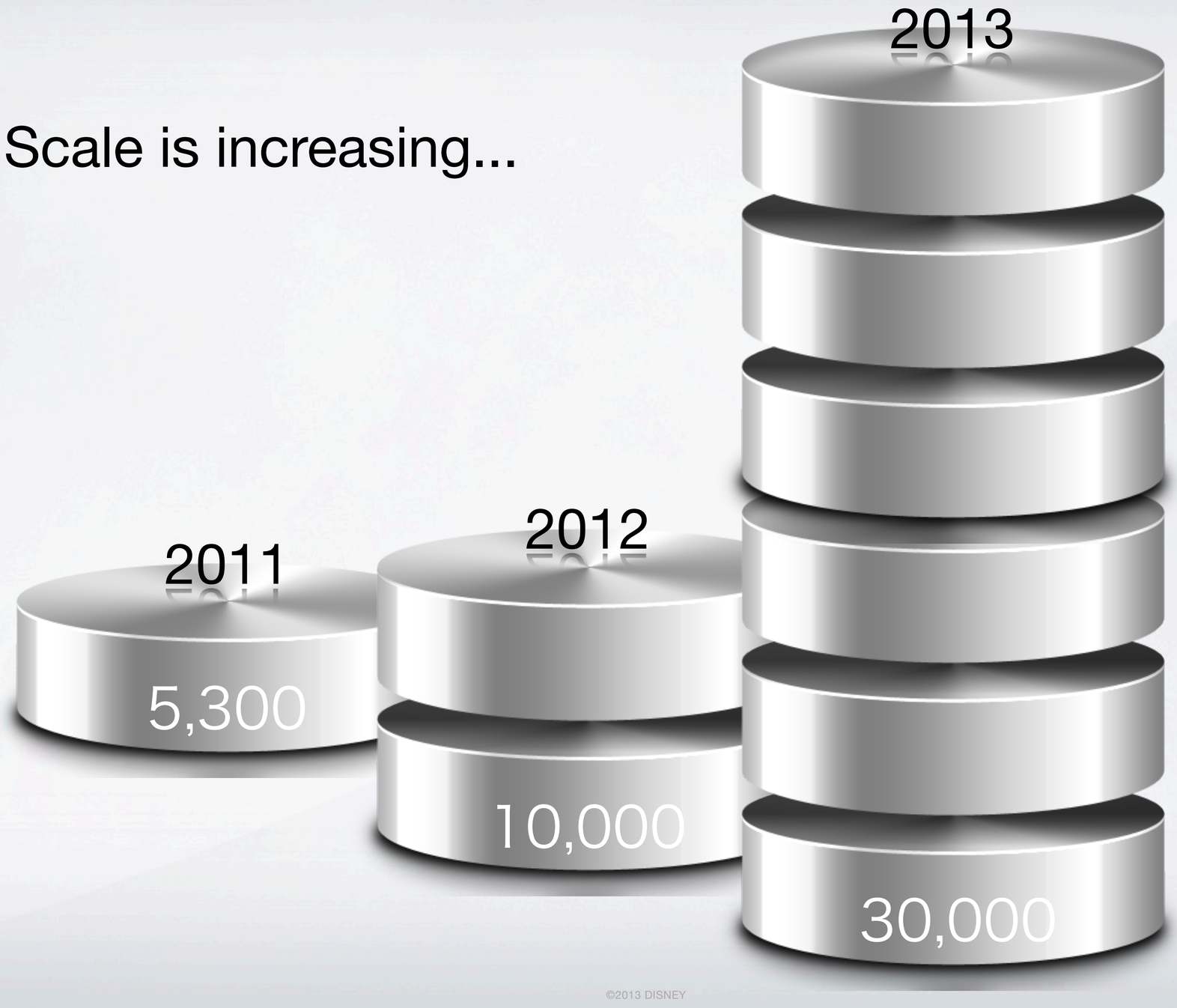
1.5MW Data Center

6PB Raw Storage

1000 Linux Workstations

800 Macs

Scale is increasing...



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50-person Systems Team

Who we are...

21 Years Experience

50% Engineering,
50% Management

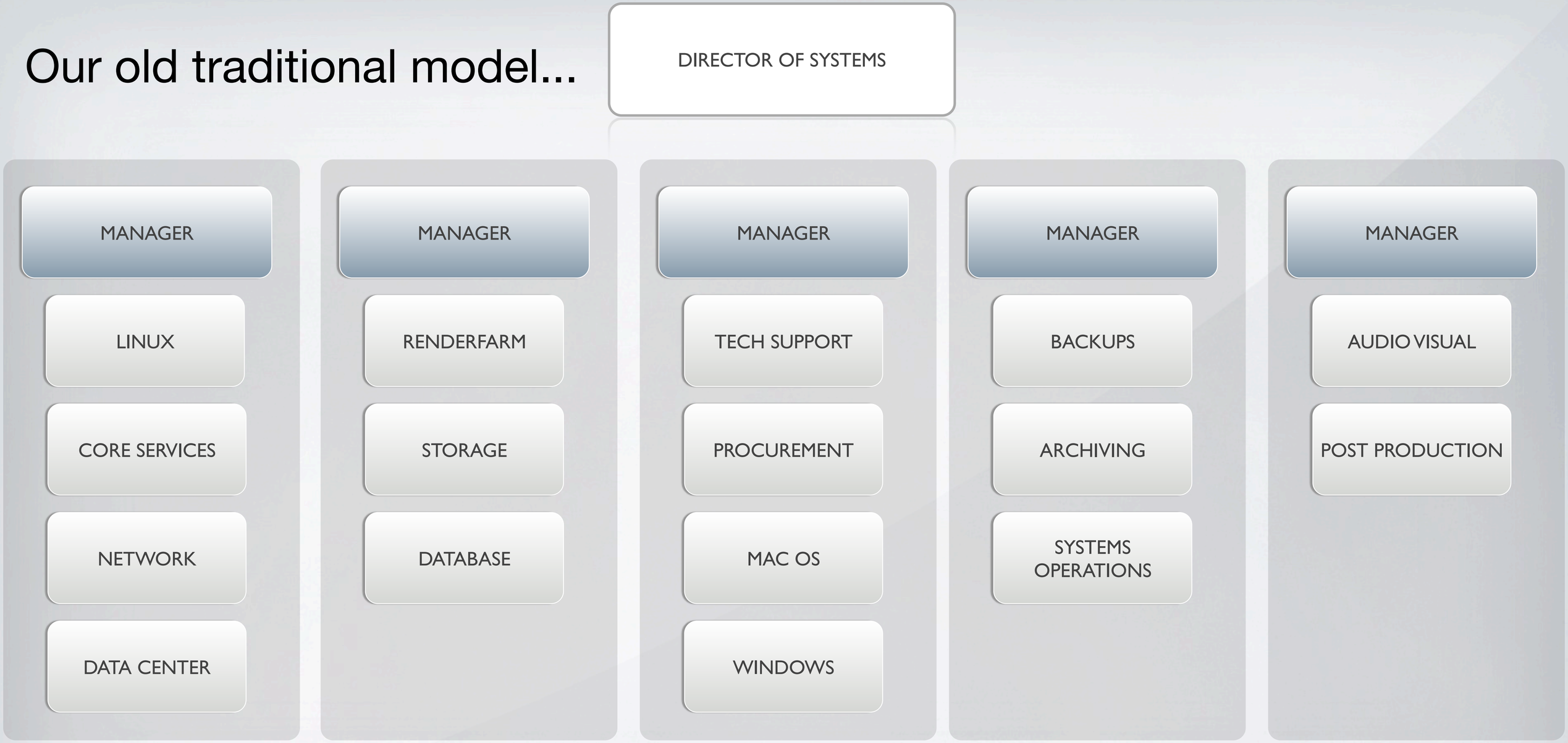
Engineers building an Engineering Organization

Use Scientific Method

Survived many top-down re-orgs

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Our old traditional model...



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DIRECTOR OF SYSTEMS

MANAGER

LINUX

CORE SERVICES

NETWORK

DATA CENTER

MANAGER

RENDERFARM

STORAGE

DATABASE

MANAGER

TECH SUPPORT

PROCUREMENT

WINDOWS

MANAGER

BACKUPS

ARCHIVING

SYSTEMS OPERATIONS

MANAGER

AUDIO VISUAL

POST PRODUCTION

Problems...

Resource Contention

Pigeonholing

Difficult to evolve

Indirect communication

Career path limitations

No empowerment

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Let’s move the managers out of the way, and remove silos...

LINUX

RENDERFARM

TECH SUPPORT

BACKUPS

AUDIO VISUAL

CORE SERVICES

STORAGE

PROCUREMENT

ARCHIVING

POST PRODUCTION

NETWORK

DATABASE

MAC OS

SYSTEMS OPERATIONS

DATA CENTER

WINDOWS

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Small Autonomous Teams

2-6 People

Responsible for R&D, Engineering & Support

Act as small Start-ups

Results Oriented Focus

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Co-located

Embedded warroom

Avoid formal meetings

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Team *Roles*

Primary Members



Secondary Members

Team Lead

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Lead *Role*



Technical expert in area

Provides Tactical & Strategic leadership

Can have any title

Works directly with stakeholders

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Lead *Role*

Lead works with managers to determine equipment, budget, & headcount











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Data Center Team



Primary *Role*

Dedicated to a team

Everyone has a Primary Role on one of the teams

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Data Center Team



Primary *Role*

Linux Team



Secondary *Role*

Storage Team



Secondary *Role*

Playing Multiple Roles...

Secondary Roles add technical and soft skills to a team

No talent left behind

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So... Where did all of the Managers go??



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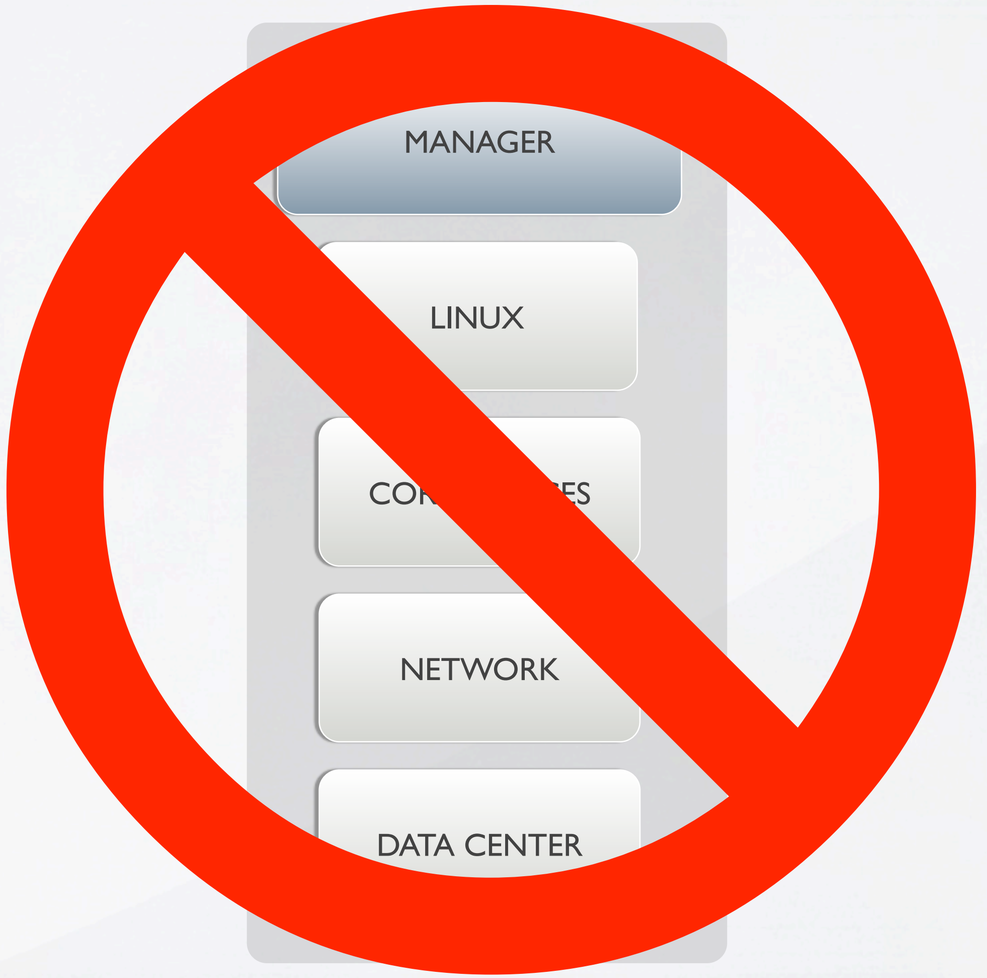
Managers work as a team

Same structure as other teams



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Managers no longer “own” functional areas; that’s the job of the team leads

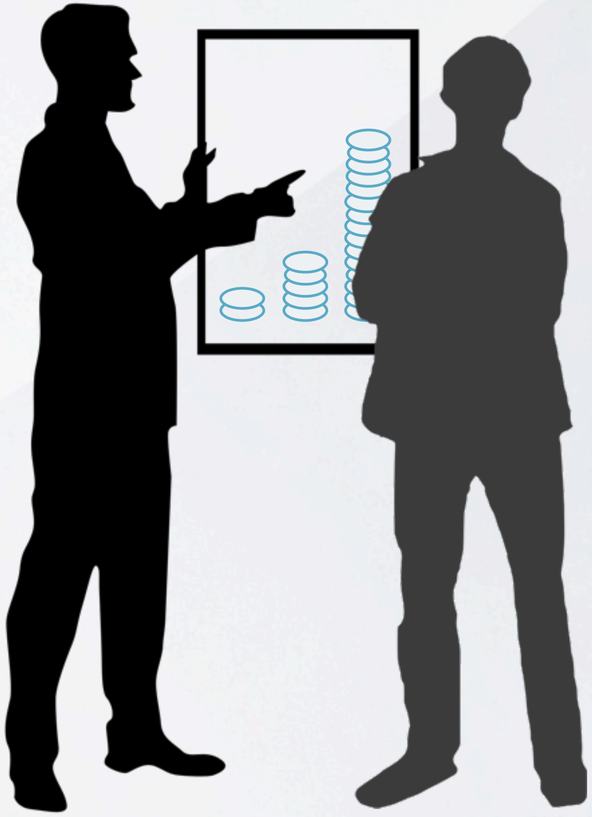


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Managers work as a team and **provide two major functions**



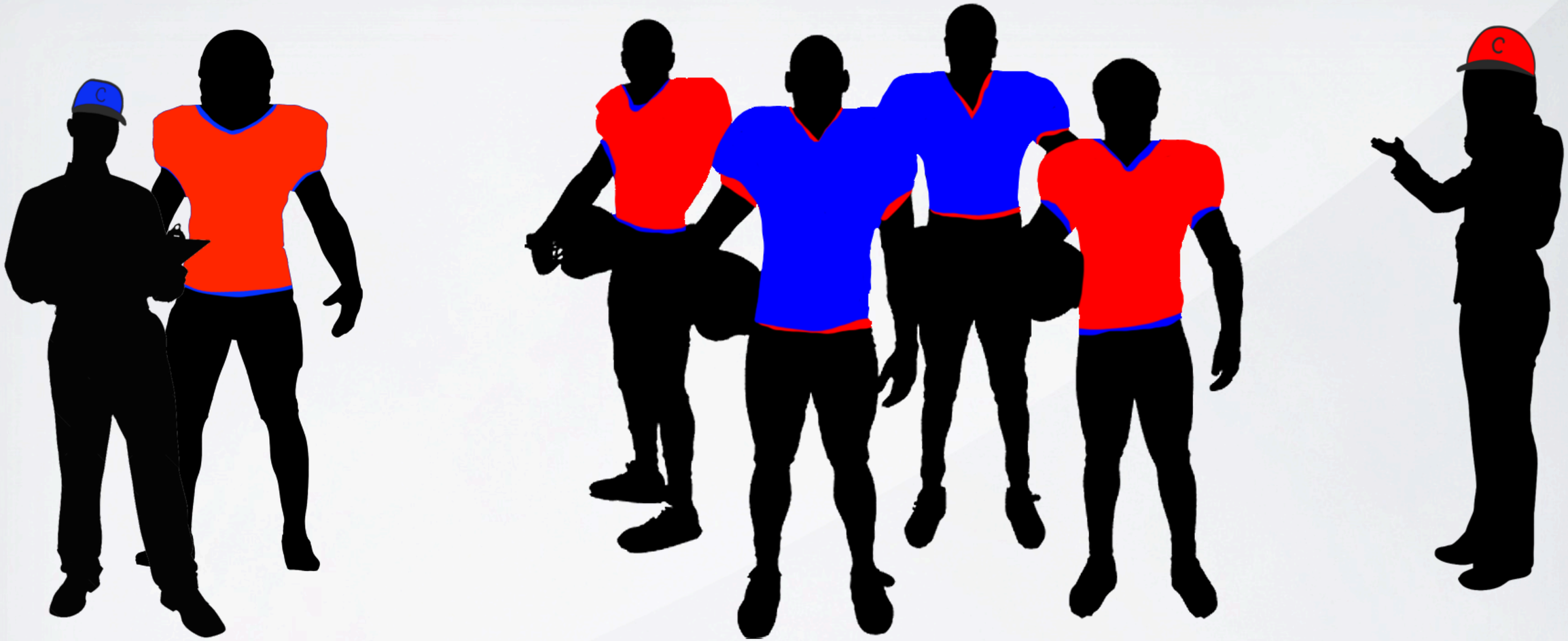
Career and Team Coaching



Team Investment Strategies

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Career & Team *Coaching*



For those that like sports analogies: Managers act more like coaches on sideline

People can pick their own Manager based on skill set and personality

Teams can have members that report to different Managers

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Fixes A Couple of Traditional Problems

When you change technical roles you no longer have to change Managers

You can change managers without changing what you do





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Investment Strategies



- Decides on where to invest
- Build new teams as technology evolves
- Select new Team Leads based on who has best ideas and vision
- Provide resources (people + capital) for Team Lead
- Helps define team goals that align with Studio direction

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This is how we look today

No Hierarchy

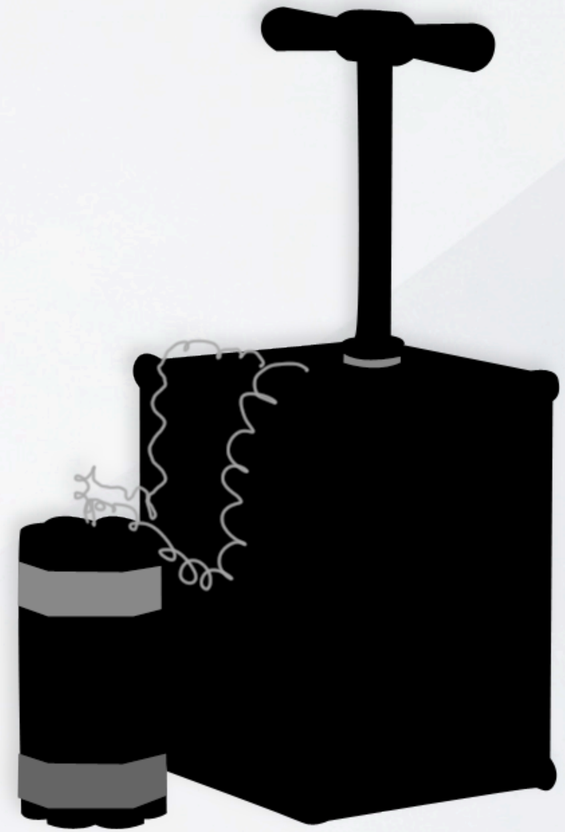
Tech Leads are top of Food Chain



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NEXT EXPERIMENT:

Breaking down the Physical Walls



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Thank you.

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