

DevOps Counselling

Or: How to help your developers and sysadmins learn to love each other (again)

TOM SULSTON

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@tomsulston



Counselling?



**Most problems
are
non-technical**

TESCO

value

**MOTIVATIONAL
POSTER**

**PLEASE BE
MOTIVATED**

**QUALITY
GUARANTEED**

Values



Values

Common purpose



Values

Common purpose

Sharing



Values

Common purpose

Sharing

Helpfulness



Values

Common purpose

Sharing

Helpfulness

Technical rigour



Values

Common purpose

Sharing

Helpfulness

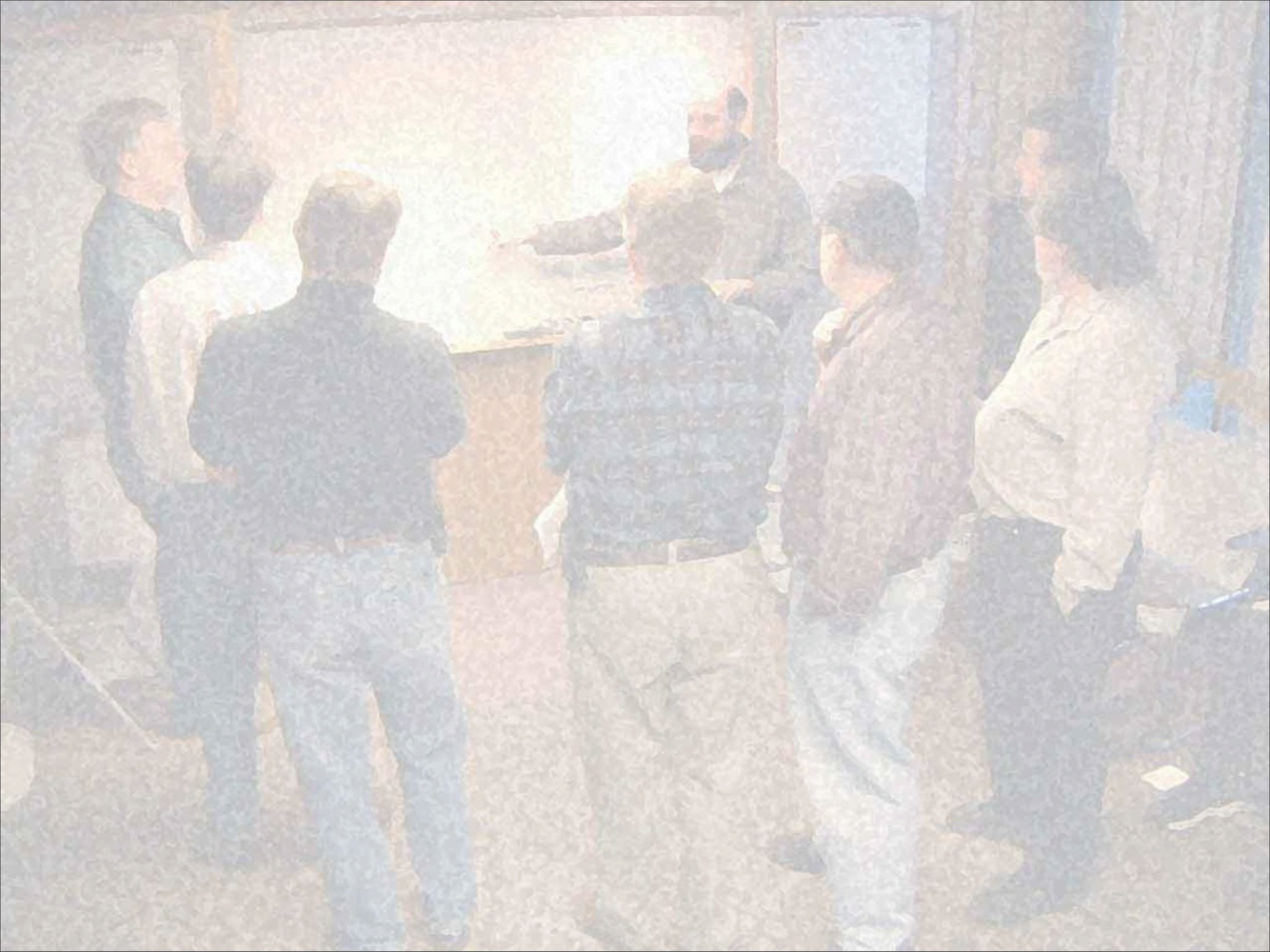
Technical rigour

Rich communication





Top Ten Tips



Agile development

A group of people in a meeting room, some standing and some sitting at a table, engaged in a discussion. The text 'Agile development' is overlaid on the image.

Agile development

A group of people in a meeting room, some pointing at a whiteboard, illustrating agile development.

Good analysis & stories.

Agile development

A group of people in a meeting room, some pointing at a whiteboard, illustrating agile development.

Good analysis & stories.

Iterative development + deployment

Agile development

Good analysis & stories.

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Continuous Integration precedes Continuous Delivery

Agile development

Good analysis & stories.

Iterative development + deployment

Continuous Integration preceeds Continuous Delivery

Automated testing

Agile development

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Bigger fish to fry



Sit together



Sit together

Communication as a factor of distance



Sit together

Communication as a factor of distance

Make time to talk



Sit together

A man in a white t-shirt and dark pants is sitting alone at a small round table in an outdoor cafe. He is leaning forward with his head resting on his hand, looking down. The cafe has many other empty tables and chairs around him, suggesting a sense of isolation. The background is slightly blurred, focusing attention on the man.

Communication as a factor of distance

Make time to talk

Have open channels

Sit together

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Communication as a factor of distance

Make time to talk

Have open channels

Talk to individuals

Sit together

A man in a white t-shirt and dark pants is sitting alone at a small round table in an outdoor cafe. He is leaning forward with his head resting on his hand, looking thoughtful or stressed. The cafe has many other empty tables and chairs around him, suggesting a sense of isolation.

Communication as a factor of distance

Make time to talk

Have open channels

Talk to individuals

COPENHAGEN
INTERNATIONAL
SOFTWARE DEVELOPMENT
CONFERENCE 2011



Training: May 9-10 // Conference : May 11-13



Steve Freeman Dan North Rebecca Parson Jez Humble David Anderson Patrick Copeland Cameron Purdy



www.gotocph.com

Encourage technical knowledge sharing

COPENHAGEN
INTERNATIONAL
SOFTWARE DEVELOPMENT
CONFERENCE 2011

goto;
conference

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Don't create knowledge silos

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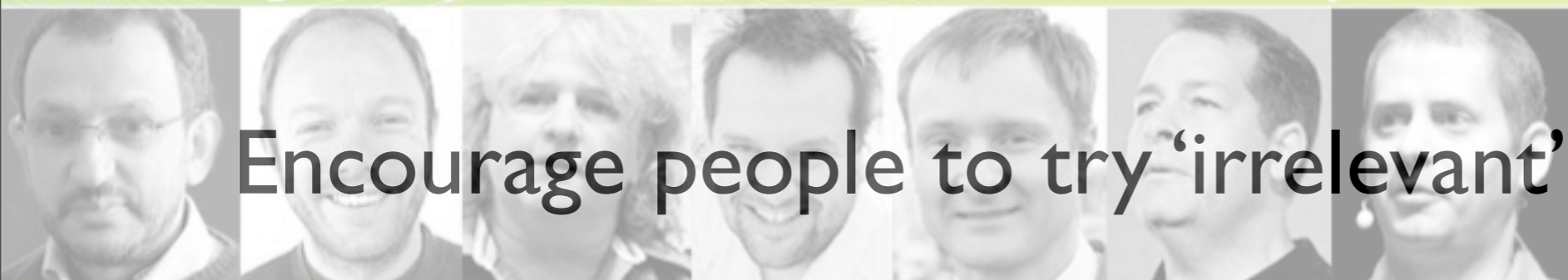
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Encourage people to try 'irrelevant' groups



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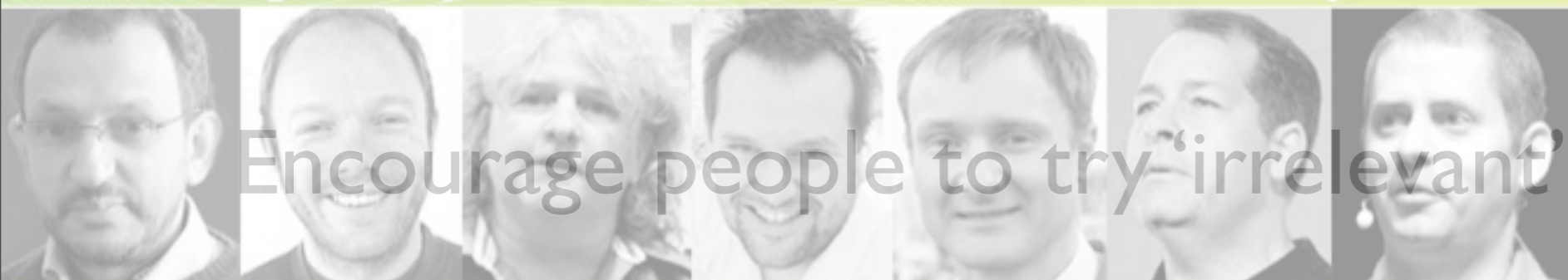
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Encourage people to try 'irrelevant' groups

Exploit Conway's Law

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Encourage technical knowledge sharing

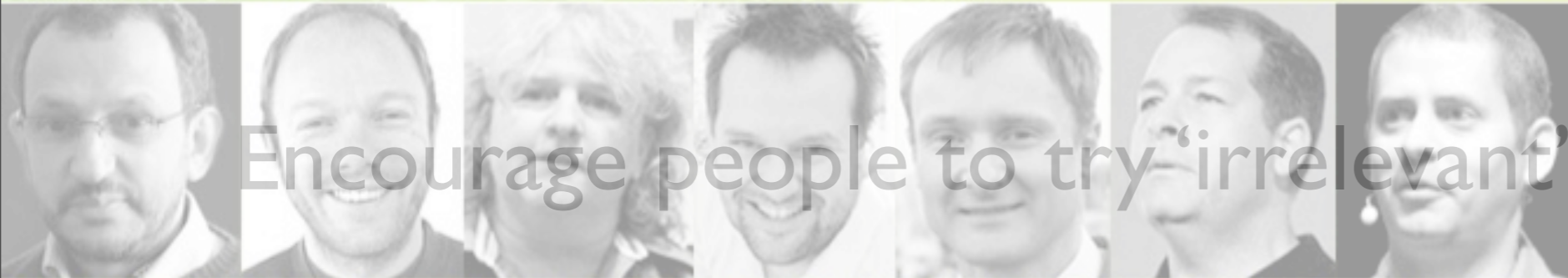
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Exploit Conway's Law



Don't tear down the silos (yet!)



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Reduce silo'd work



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Reduce silo'd work

Don't have big central services teams



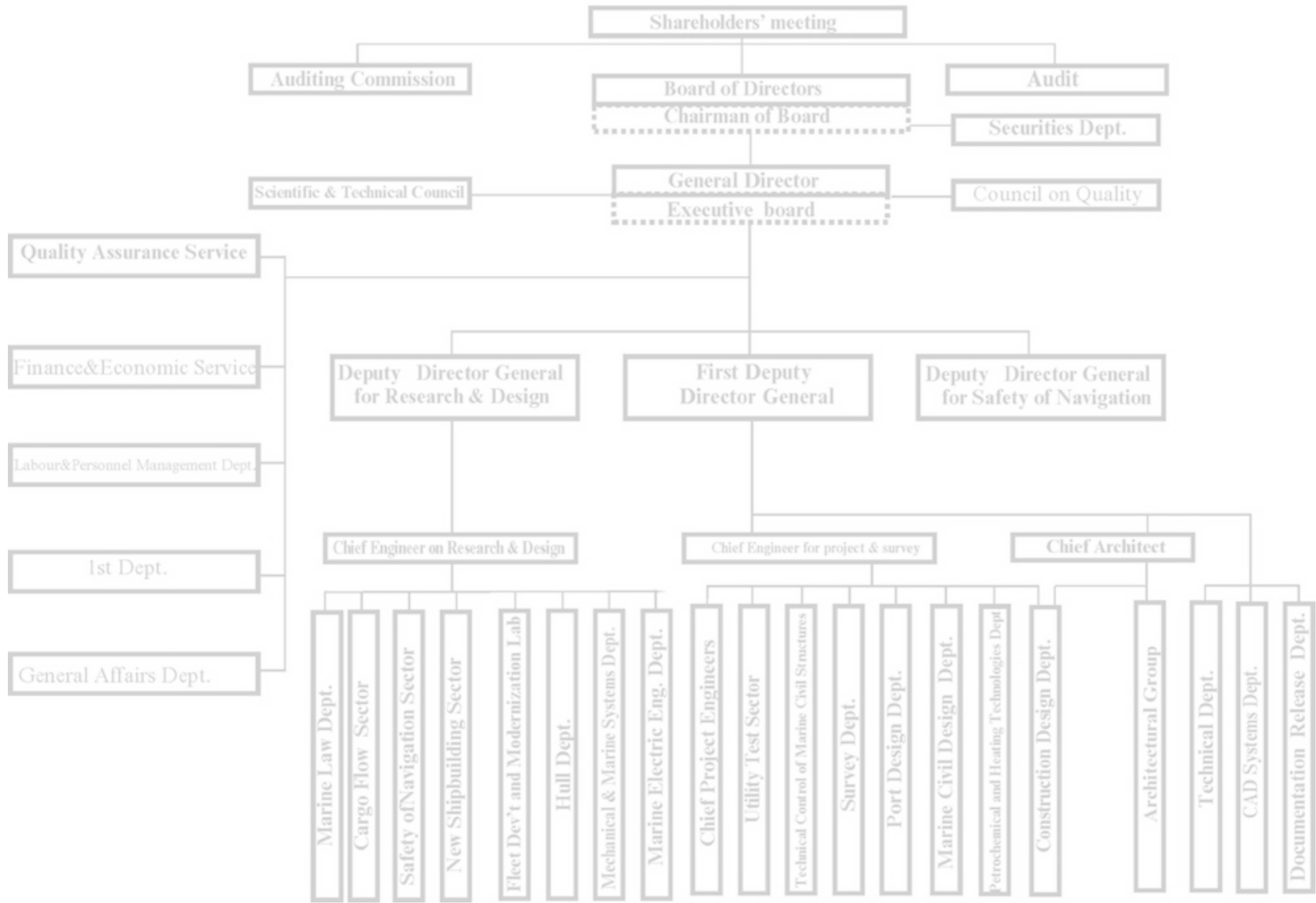
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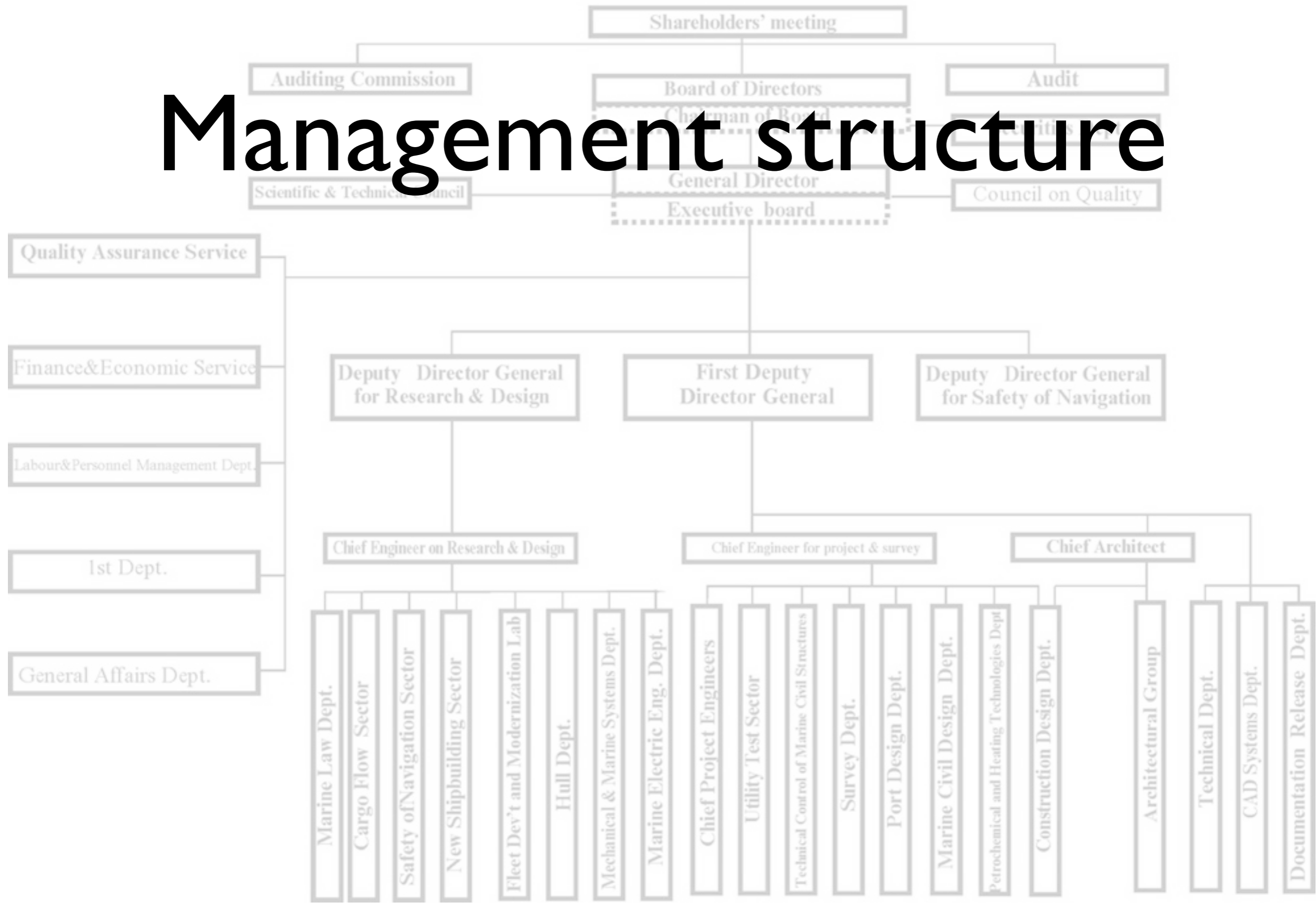
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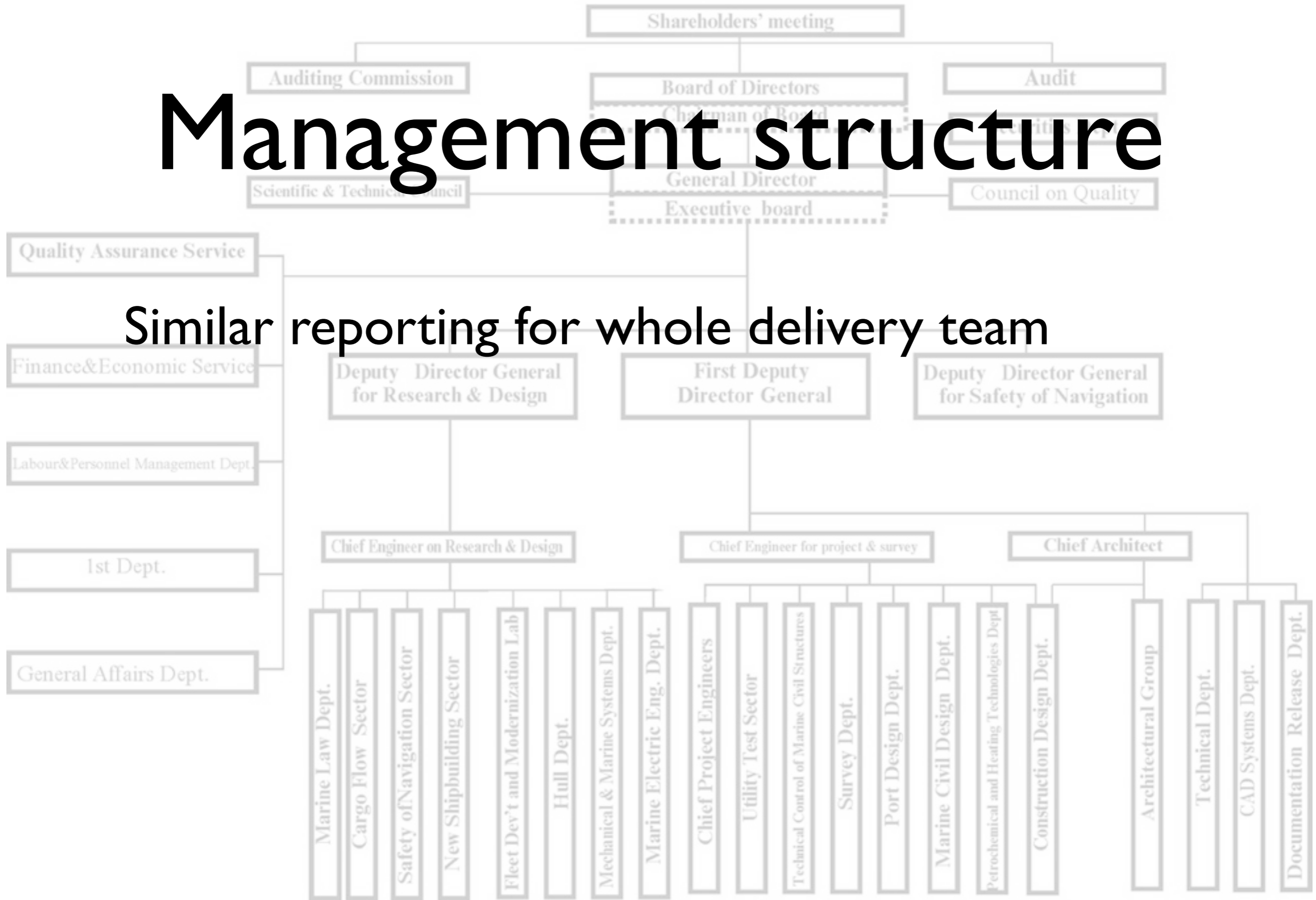


Management structure

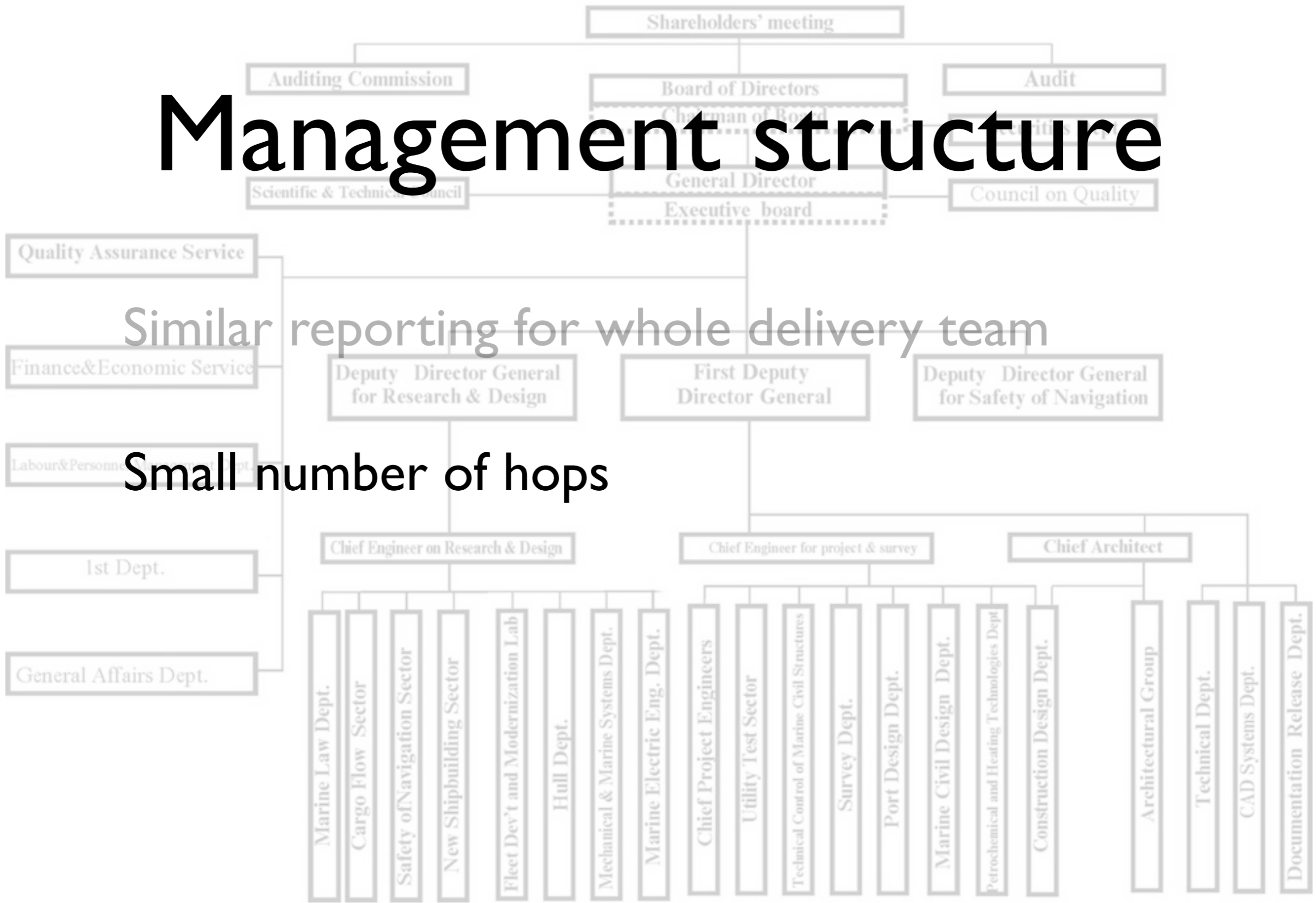


Management structure

Similar reporting for whole delivery team



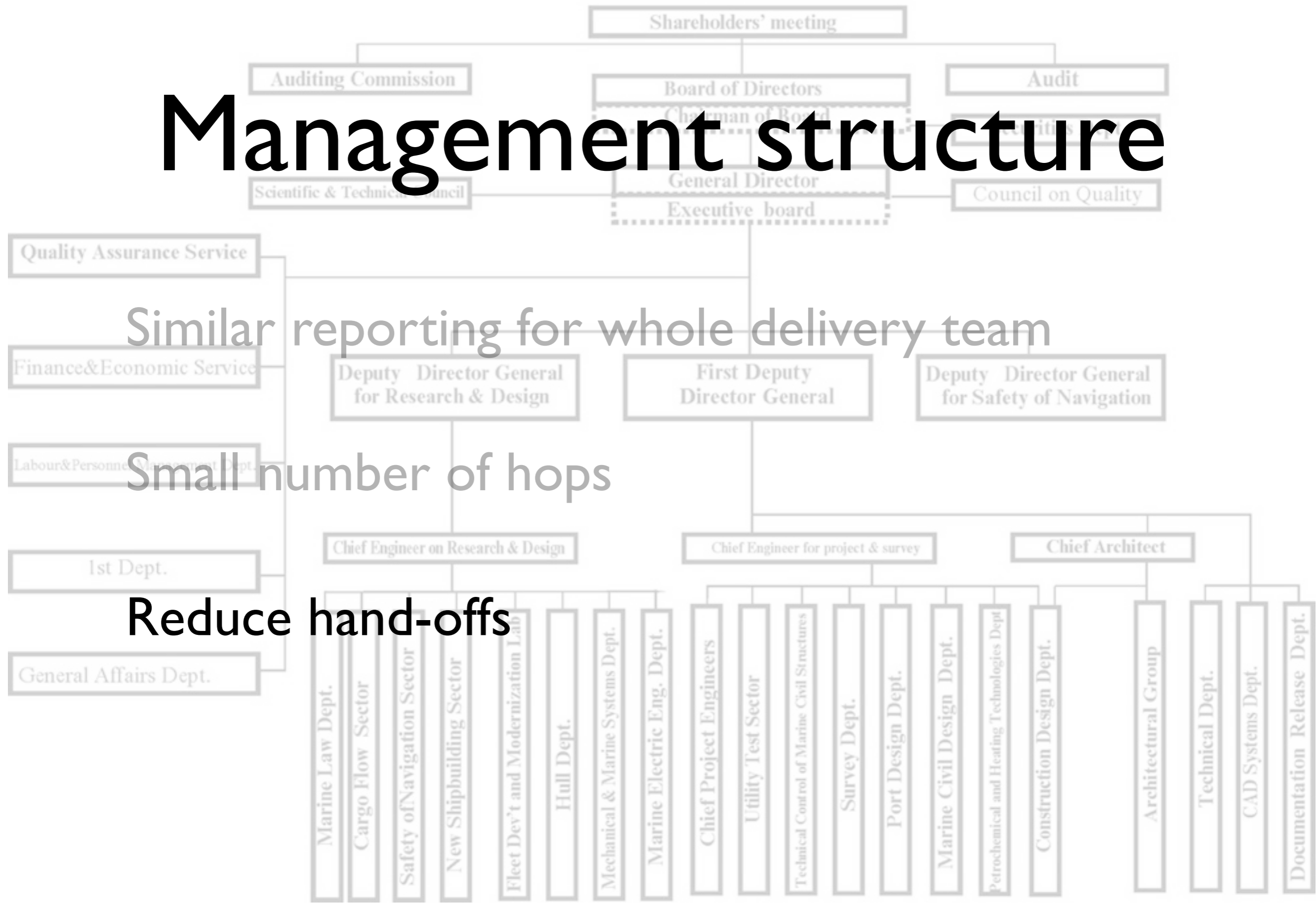
Management structure



Similar reporting for whole delivery team

Small number of hops

Management structure

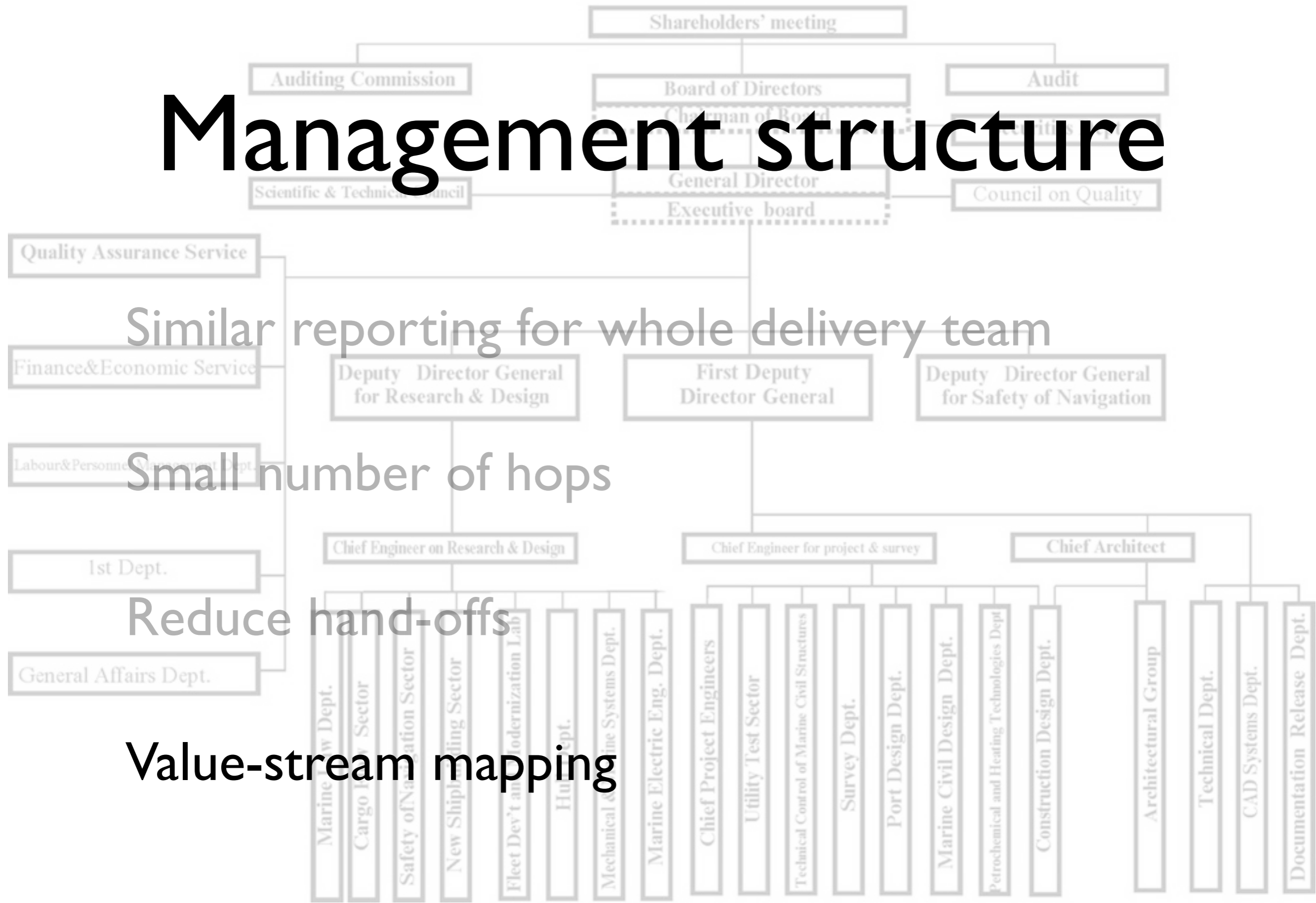


Similar reporting for whole delivery team

Small number of hops

Reduce hand-offs

Management structure



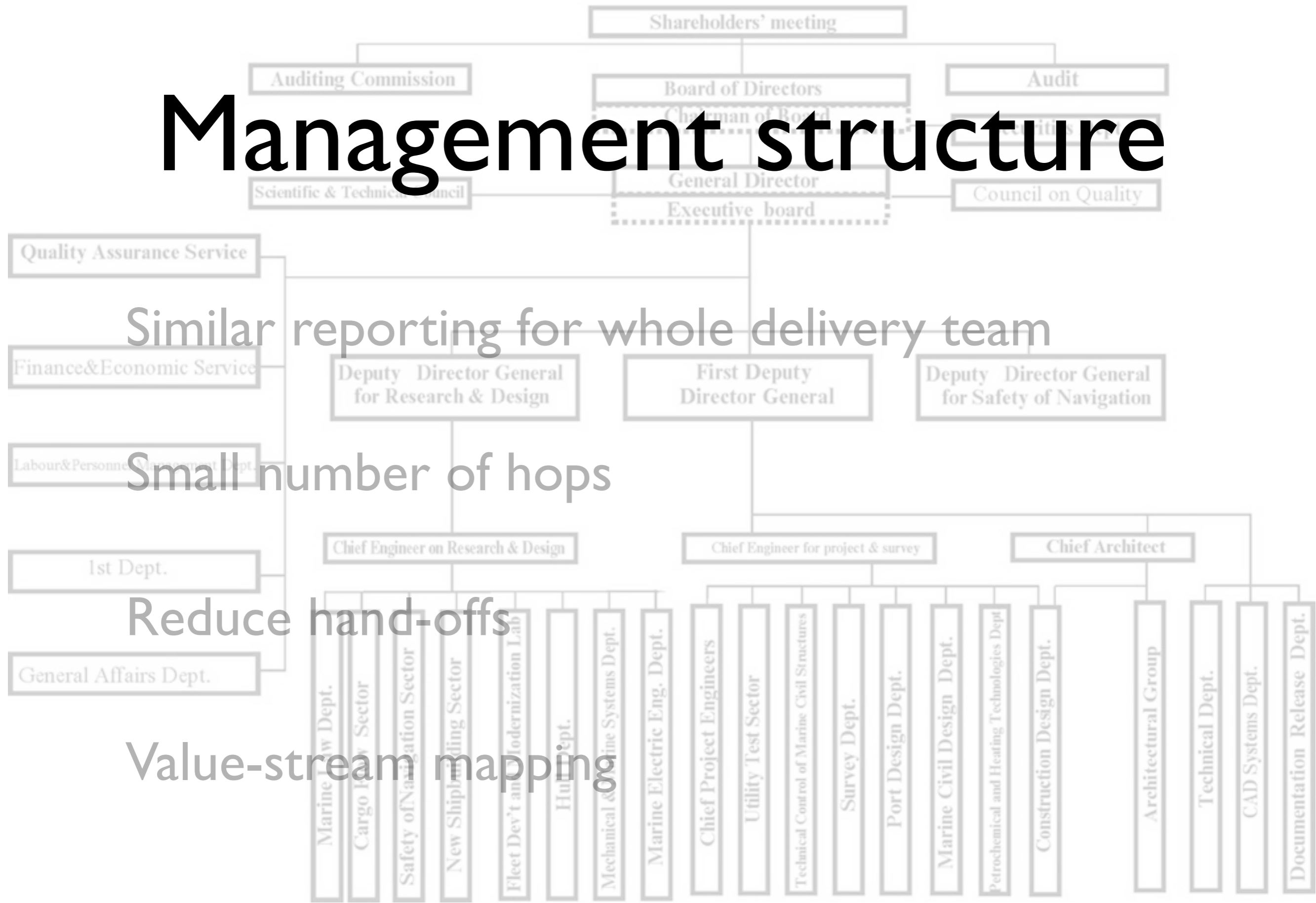
Similar reporting for whole delivery team

Small number of hops

Reduce hand-offs

Value-stream mapping

Management structure



Similar reporting for whole delivery team

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Value-stream mapping



Incentives





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Are your incentives helping or hurting?



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Focus on delivery



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Reward everyone fairly



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Don't get gamed



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Celebrate good times!



Celebrate good times!

Come on!



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Come on!

Include everyone



Celebrate good times!

Come on!

Include everyone

Be thoughtful



Celebrate good times!

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Celebrate failure



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2008-09

laughingsquid.com

You are not in the sudoers file.
This incident will be reported.

Share access to systems

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Everyone has RW to Puppet/Chef

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0715 Plat 4
LONDON EUSTON

Calling at:
Birmingham International,
Coventry,
LONDON EUSTON.

On Time

First Class at Front
restaurant onboard for 1st

0715 Plat 8A
FOUR OAKS

Calling at:
Duddeston,
Aston,
Gravelly Hill,
Erdington,
Chester Road,
Wyld Green,
Sutton Coldfield,
FOUR OAKS.

On Time

Central Trains

0717 Plat 5B
CHESTER

Calling at:
Wolverhampton,
Bilbrook,
Codsall,
Albrighton,
Cosford,
Telford Central,
Wellington (Shropshire),
Shrewsbury,
Gobowen,
Chirk,
Ruabon,
Wrexham General,
CHESTER.

On Time

Arriva Trains Wales

0718 Plat 3A
COVENTRY

Calling at:
Birmingham International,
Hampton-in-Arden,
Berkswell,
Tile Hill,
Canley,
COVENTRY.

On Time

Central Trains

0718 Plat 5B
MANCHESTER PICCADILLY

Calling at:
Wolverhampton,
Stafford,
Stoke-on-Trent,
Congleton,
Macclesfield,
Stockport,
MANCHESTER PICCADILLY.

On Time

Quiet Coach - Coach F
Virgin Voyager

DEPARTURE

Time	Destination	Plat
0703	Bournemouth	1A
0712	Stafford	8A
	Via:Walsall and Hednesford	
0714	Redditch	11B
0715	London Euston	4
0715	Four Oaks	8A
0717	Chester	5B
	Via:Shrewsbury	
0718	Coventry	3A
0718	Manchester Pic	5B
	Via:Stoke-on-Trent	
0720	Great Malvern	12B
0721	Stansted Apt	10A
0721	Liverpool L St	4C
	Calls Liverpool Sea	

Time Now 07:11

0724 Plat 11B
LONGBRIDGE

Calling at:
Five Ways,
University,
Elly Oak,
Burnville,
Kings Norton,
Northfield,
LONGBRIDGE.

On Time

Central Trains

0725 Plat 8A
LICHFIELD TRENT VALLEY

Calling at:
Aston,
Gravelly Hill,
Erdington,
Chester Road,
Wyld Green,
Sutton Coldfield,
Four Oaks,
Butlers Lane,
Blake Street,
Shenstone,
Lichfield City,
LICHFIELD TRENT VALLEY.

On Time

Central Trains

0727 Plat 5A
WALSALL

Calling at:
Duddeston,
Aston,
Witton,
Perry Barr,
Hamstead,
Tame Bridge,
Bescot Stadium,
WALSALL.

On Time

Central Trains

0730 Plat 2
LONDON EUSTON

Calling at:
Birmingham International,
Coventry,
LONDON EUSTON.

On Time

First Class at Front

0730 Plat 10B
CARDIFF CENTRAL

Calling at:
Cheltenham Spa,
Gloucester,
Newport,
CARDIFF CENTRAL.

On Time

Central Trains

ARRIVAL

Time	Origin	Plat
0659	Crewe	1A
0711	Four Oaks	11B
0714	Longbridge	8A
0715	Northampton	3
0719	Lichfield City	11B
0723	Longbridge	8A
0724	Wolverhampton	2
0727	Nottingham	10
0730	Lichfield T V	11
0733	Redditch	8A
0735	Derby	10
0742	Four Oaks	11
0743	Longbridge	8A
0745	Southampton C	6B
0745	Great Malvern	9A

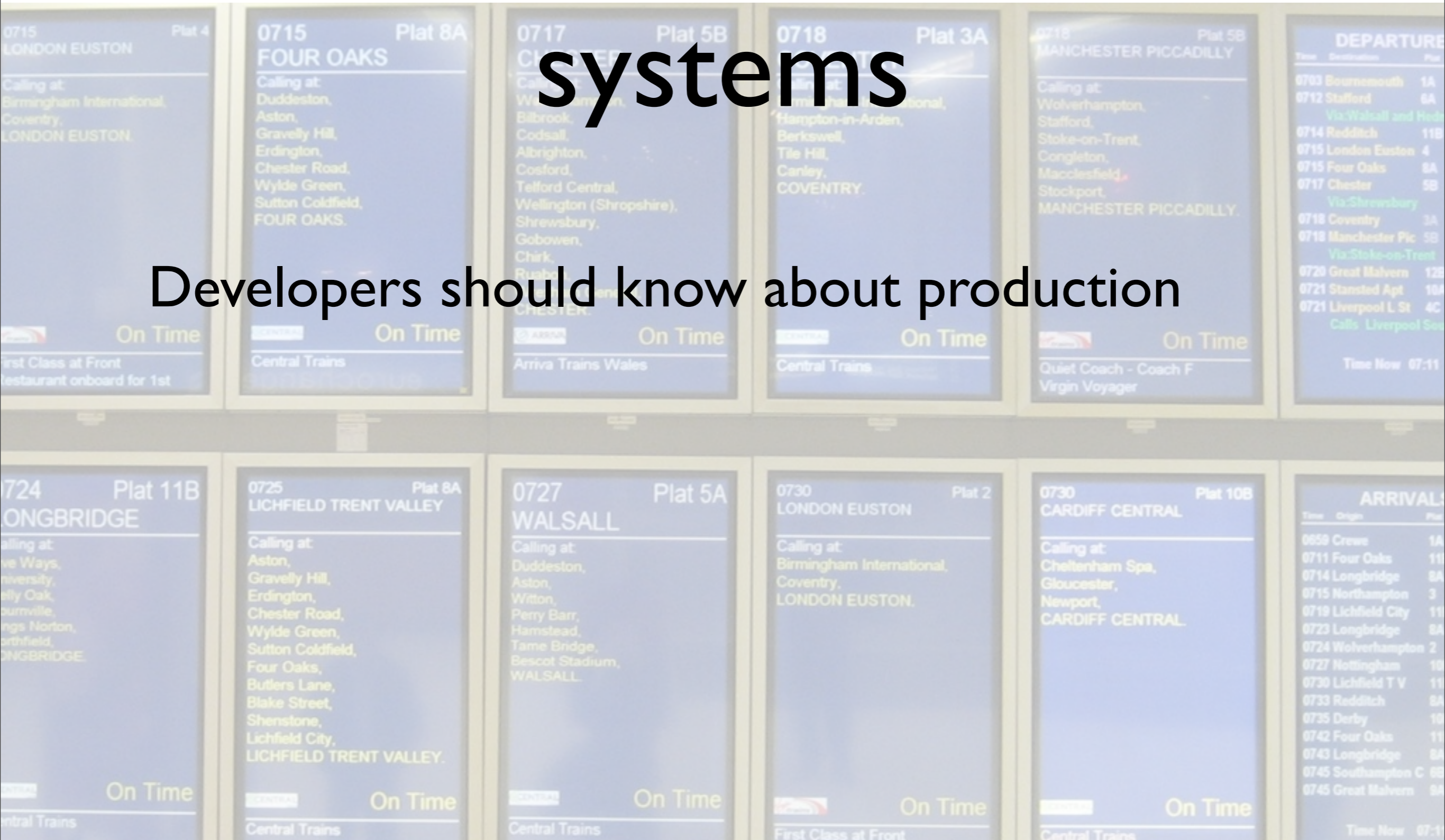
Time Now 07:11

Information-sharing systems



Information-sharing systems

Developers should know about production



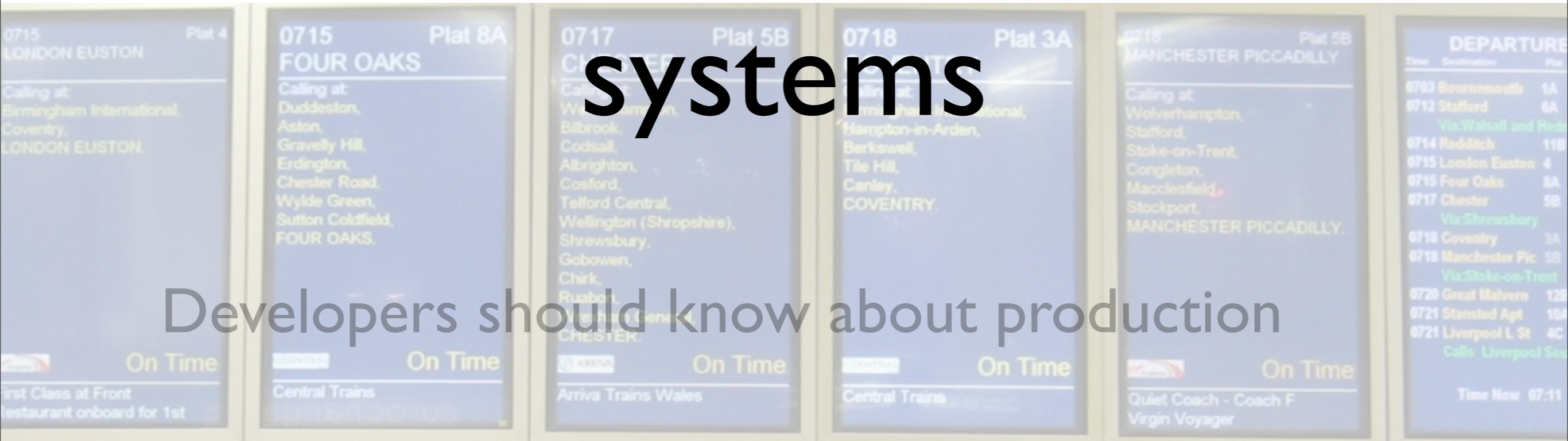
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SAs should see new features coming



Information-sharing systems



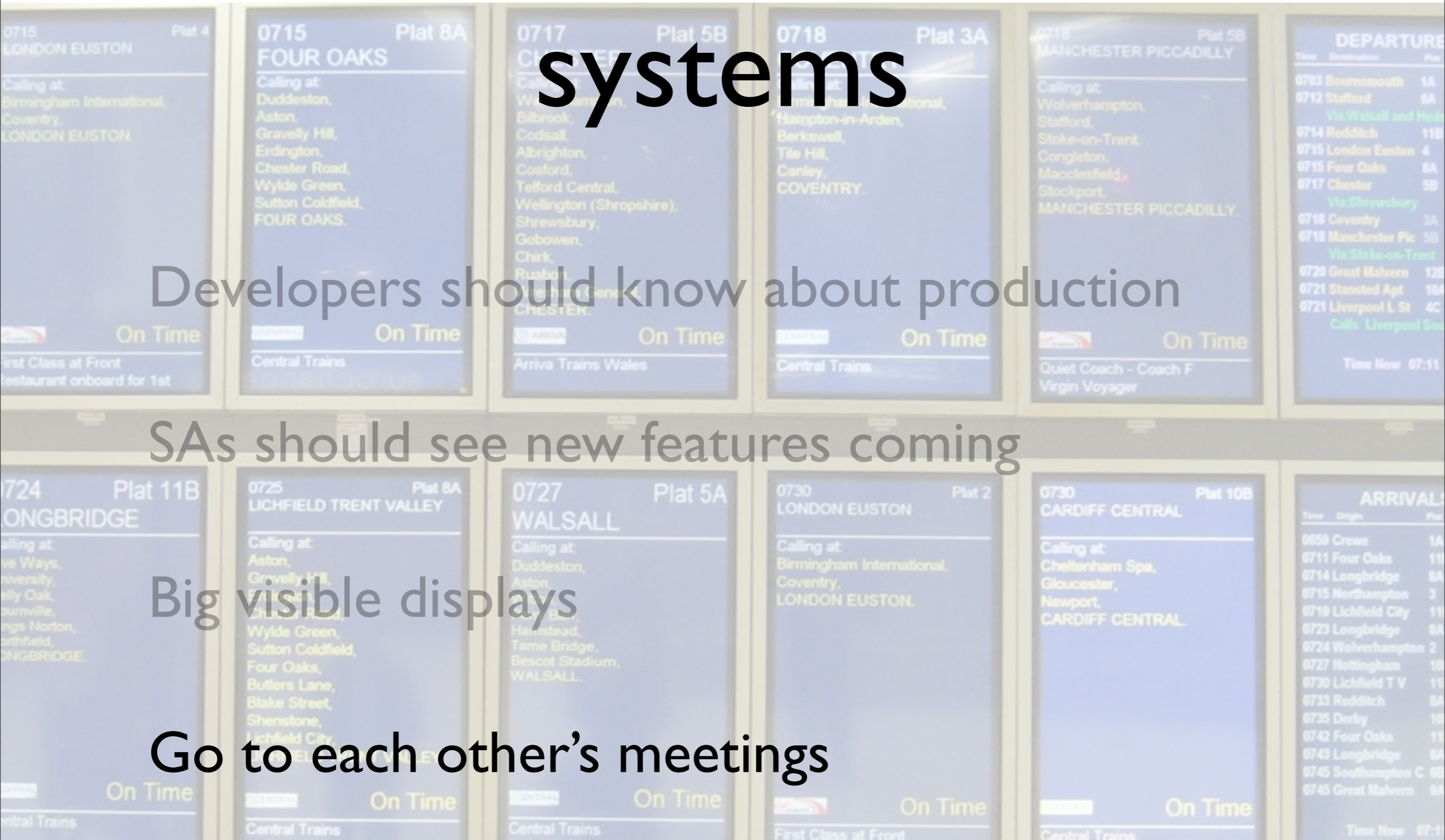
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Big visible displays

Information-sharing systems



Developers should know about production

SAs should see new features coming

Big visible displays

Go to each other's meetings

Information-sharing systems

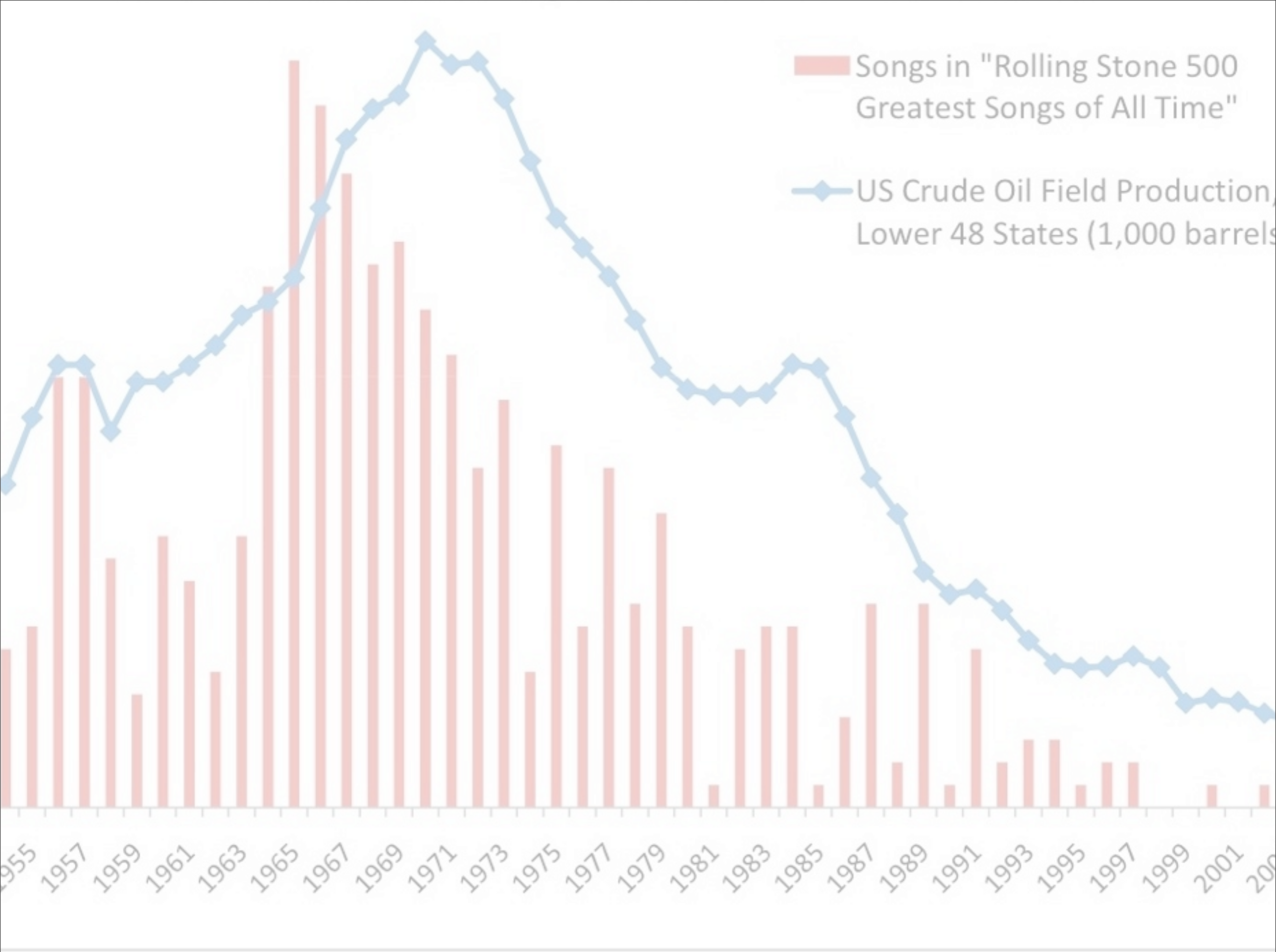


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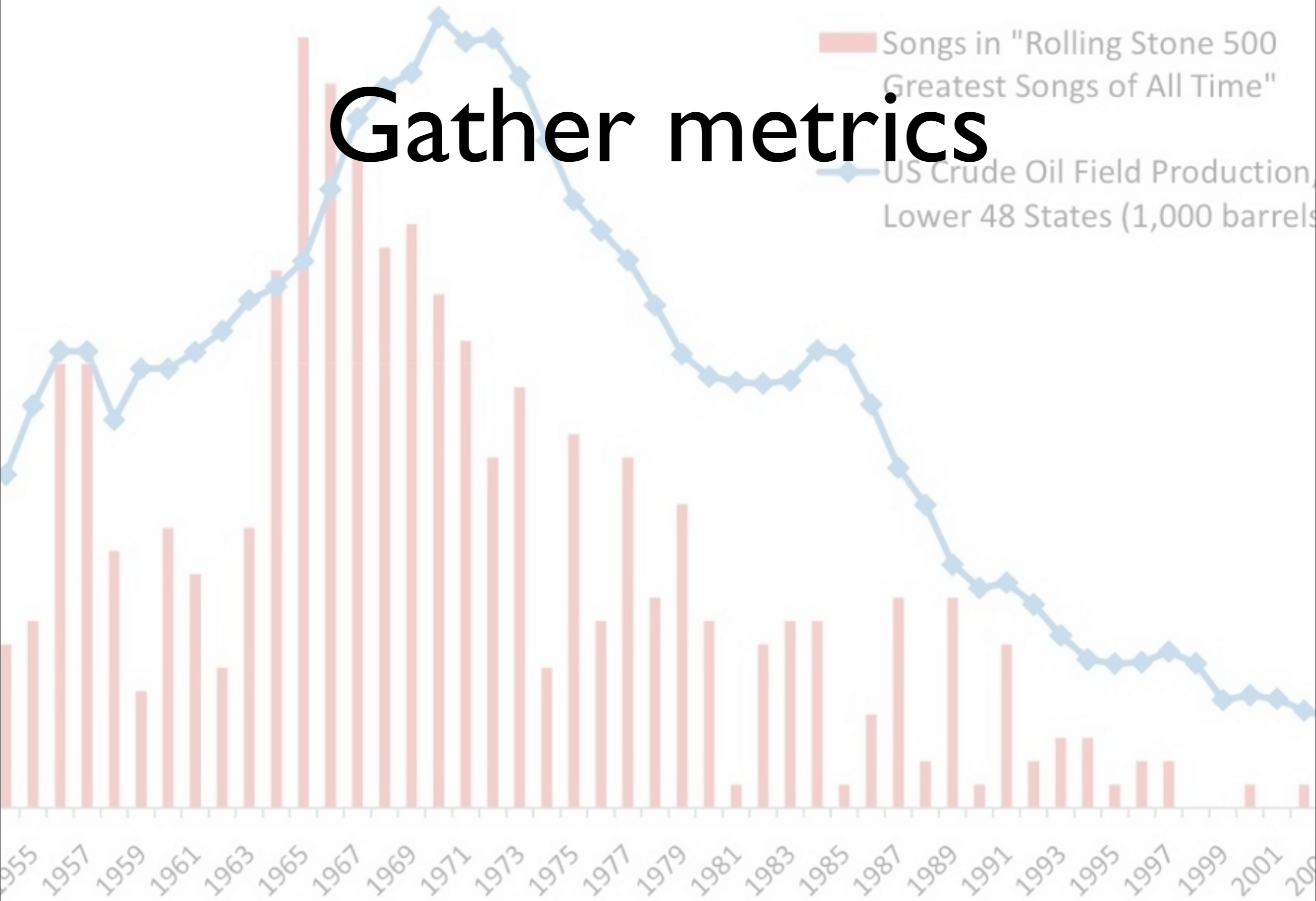
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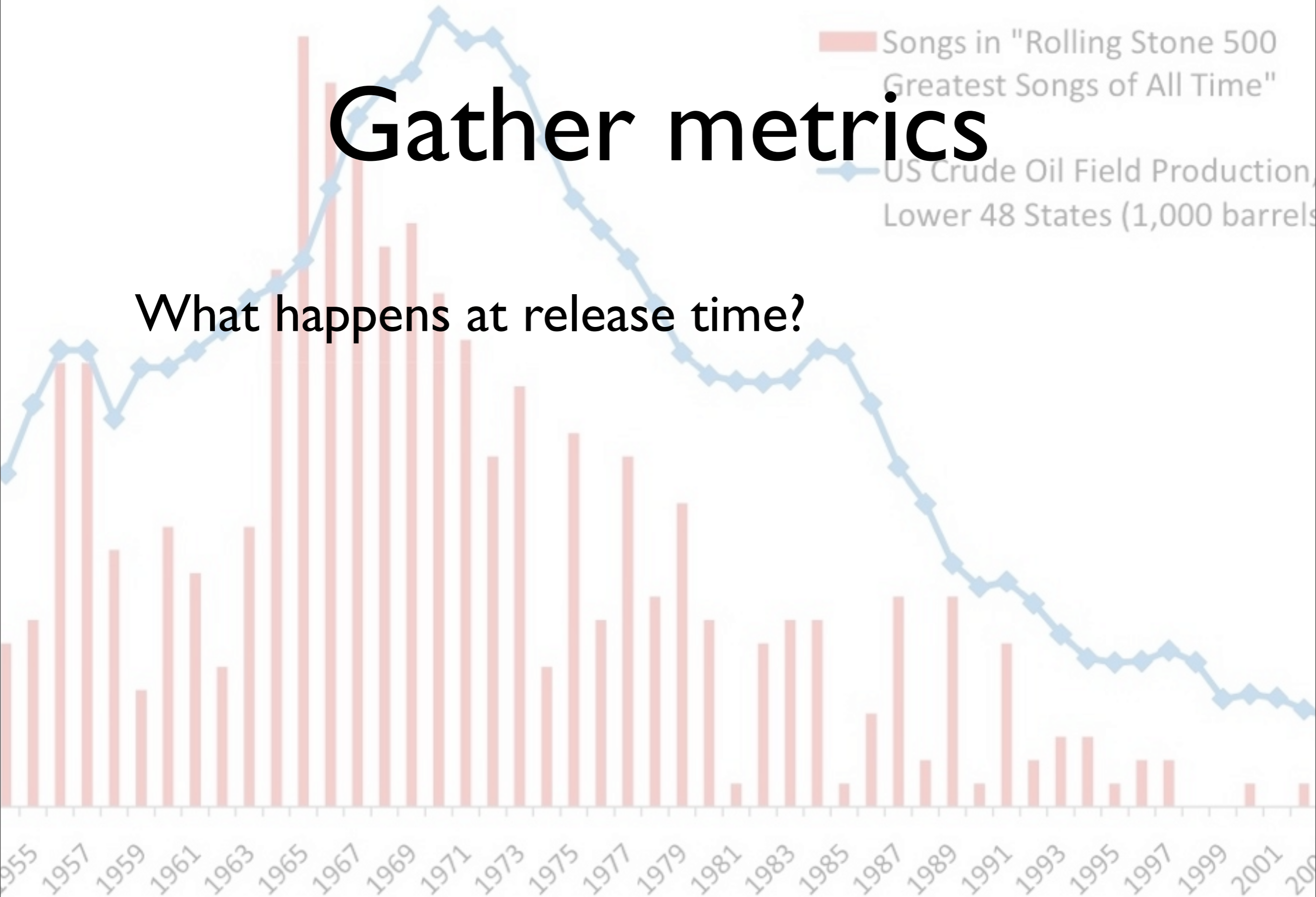
Gather metrics



Gather metrics

— Songs in "Rolling Stone 500 Greatest Songs of All Time"
— US Crude Oil Field Production, Lower 48 States (1,000 barrels)

What happens at release time?



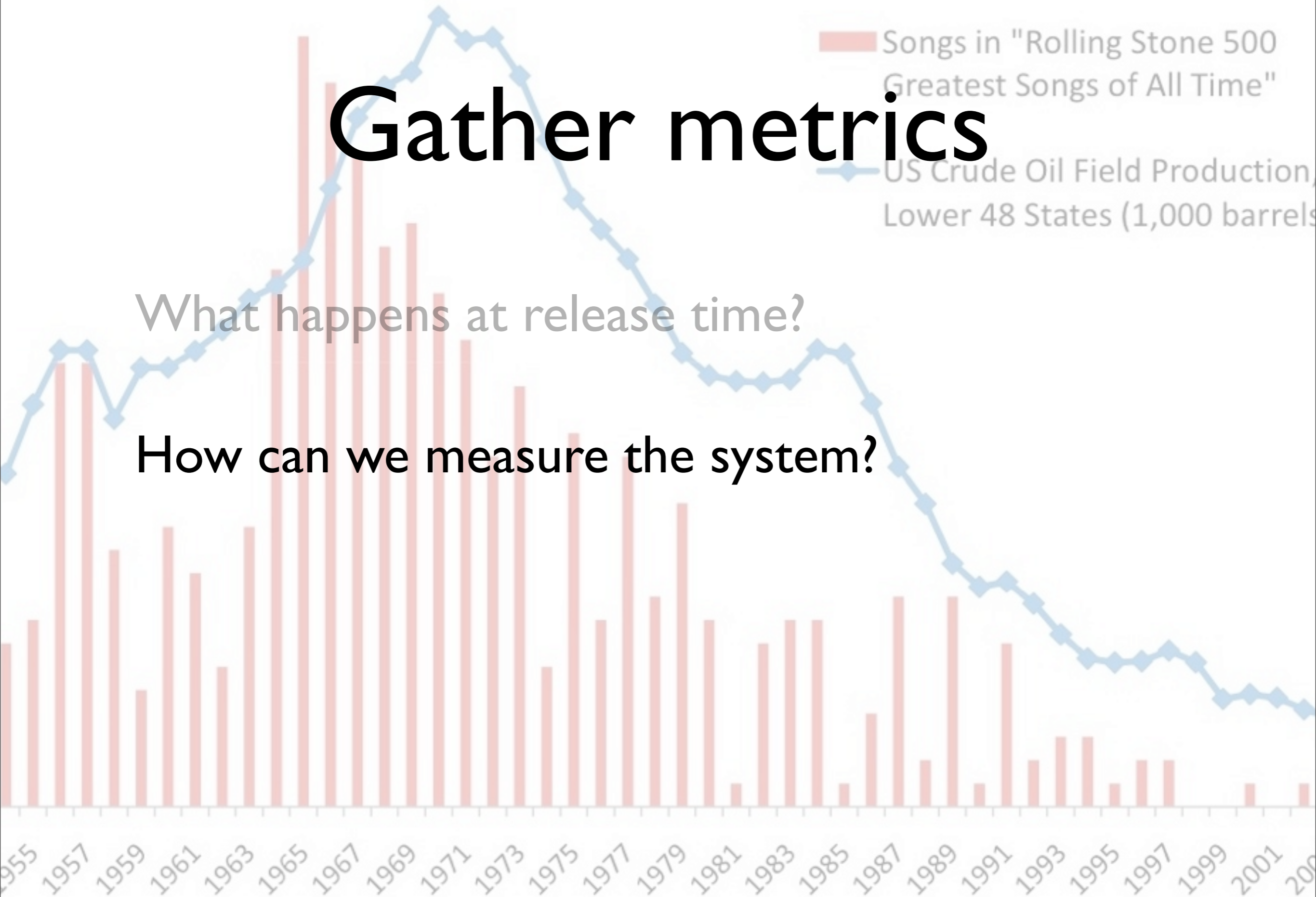
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US Crude Oil Field Production, Lower 48 States (1,000 barrels)

What happens at release time?

How can we measure the system?



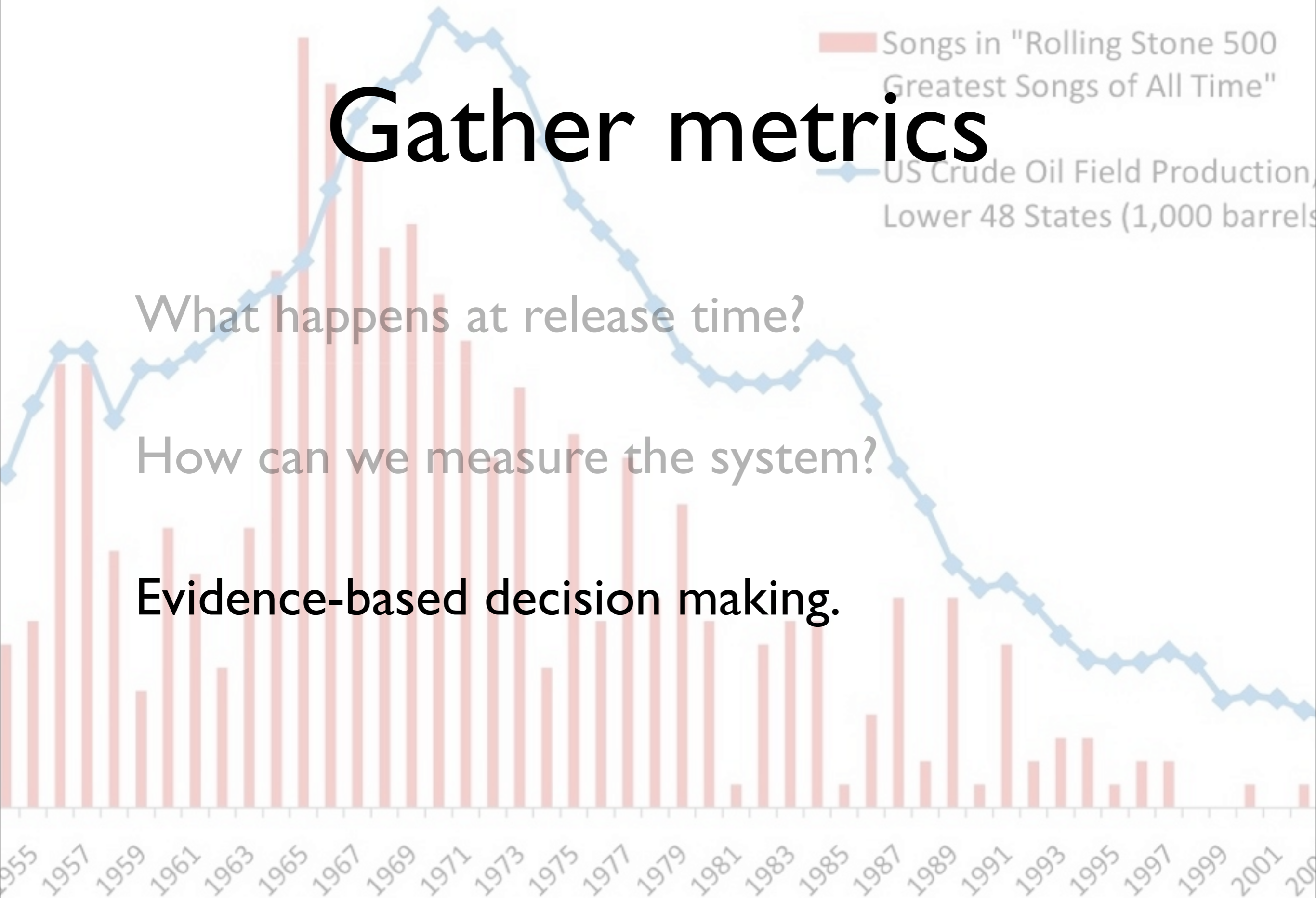
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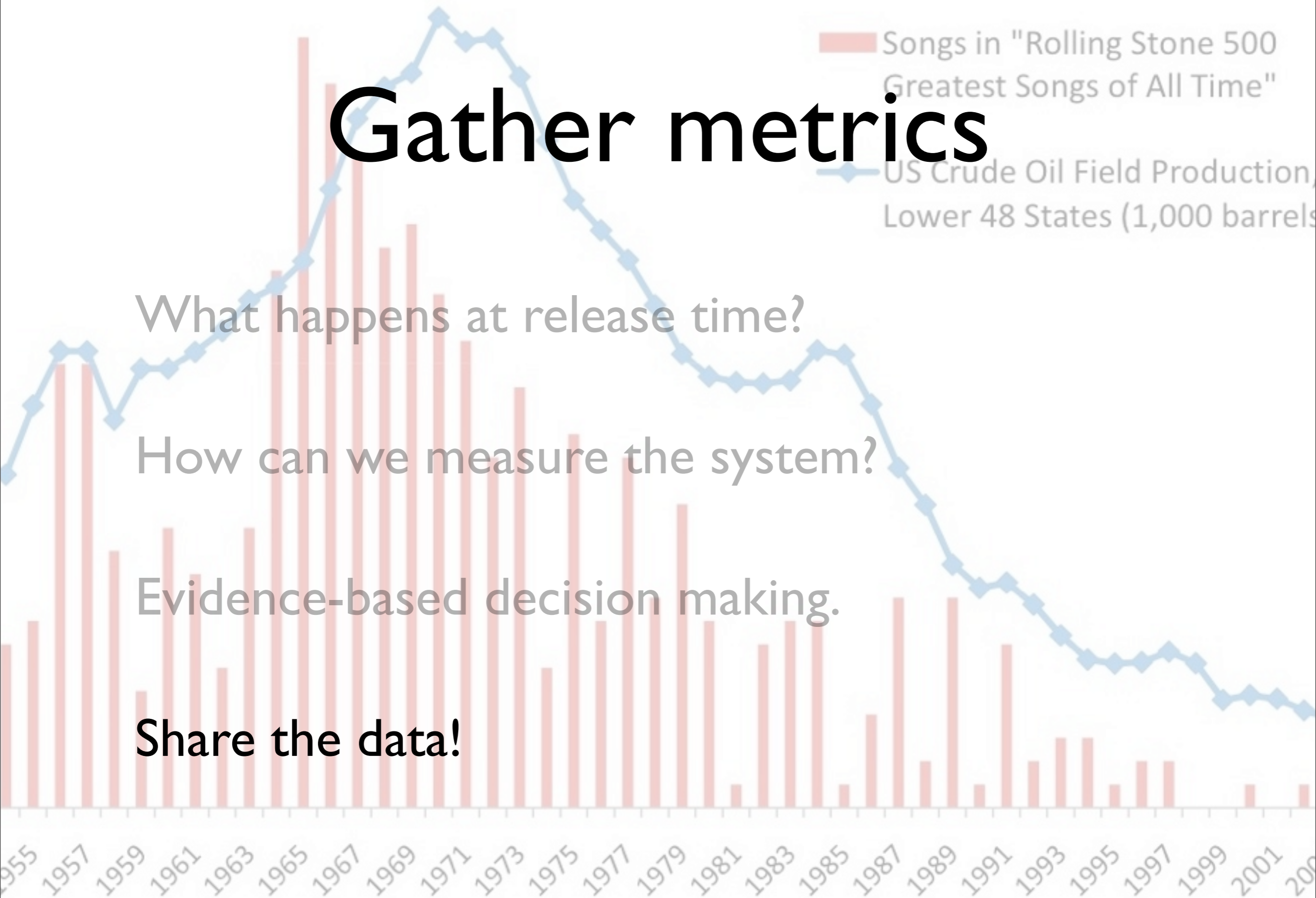
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Share the data!



Gather metrics

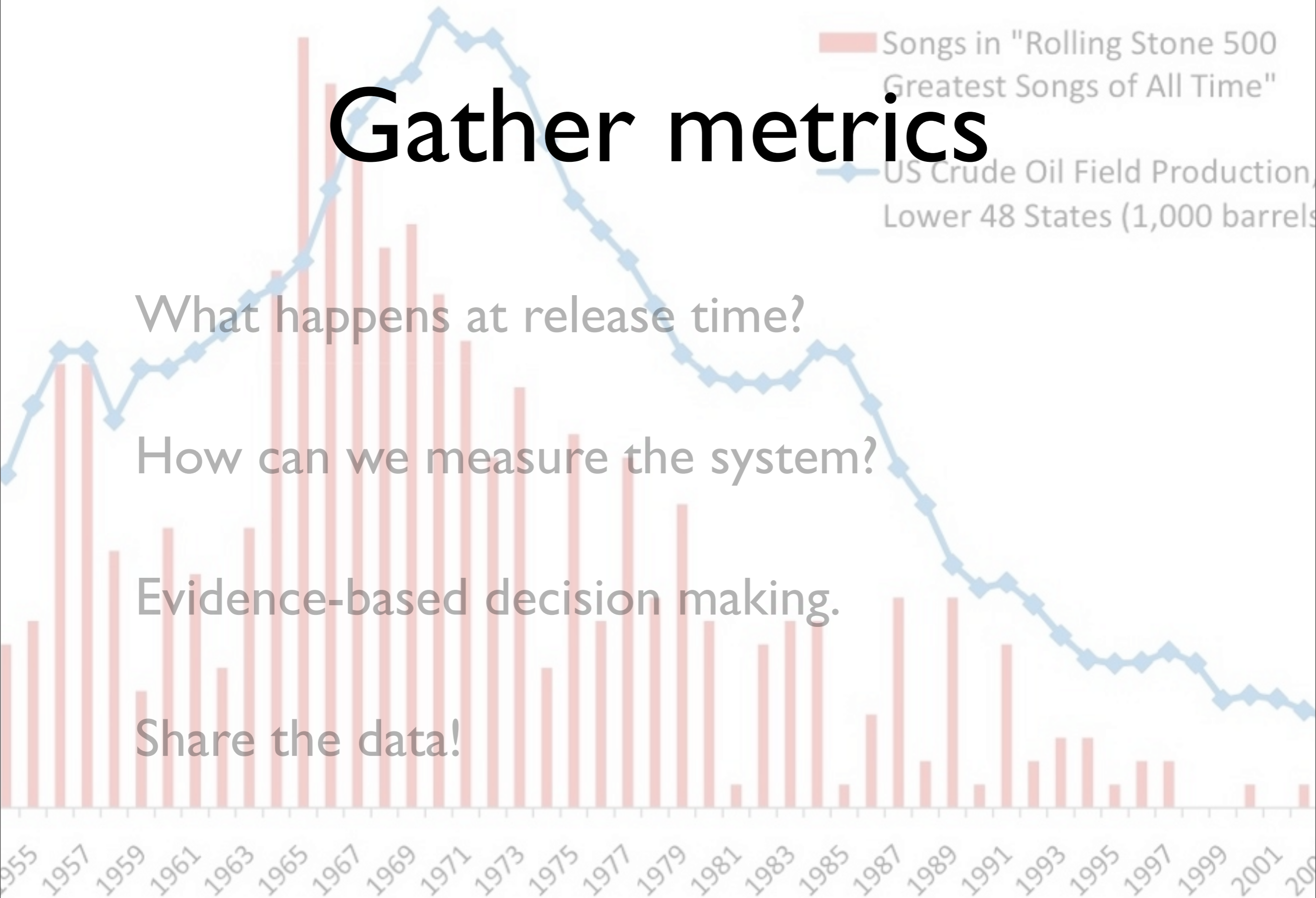
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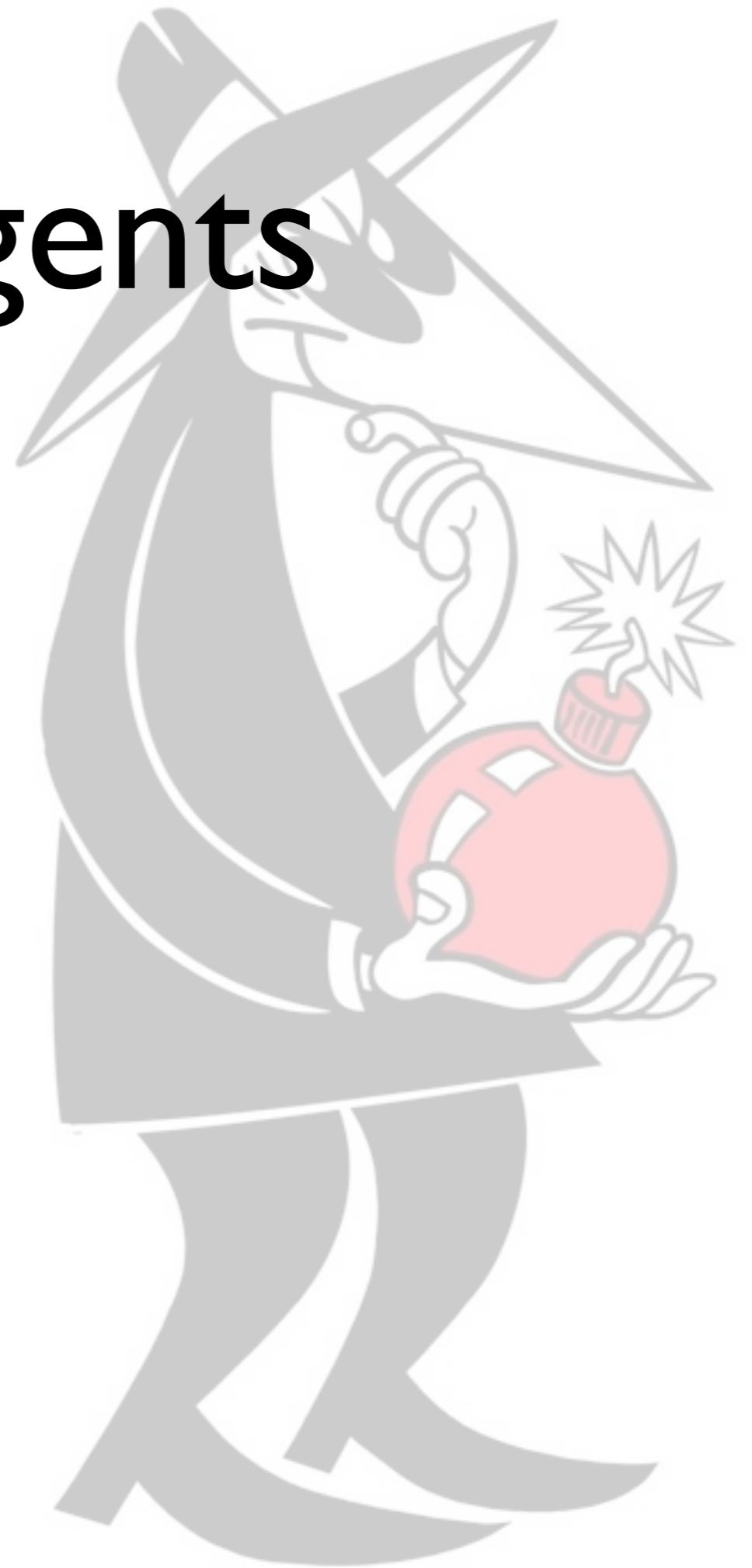


Change Agents



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Go and make friends



Change Agents

Go and make friends

Stir things up



Change Agents

Go and make friends

Stir things up

Break existing organisational boundaries

Change Agents

Go and make friends

Stir things up

Break existing organisational boundaries

Internal or external?

Change Agents

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Internal or external?

How about you?

TOM SULSTON

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