

The challenges of software development where software is everywhere...

Gary Barnett



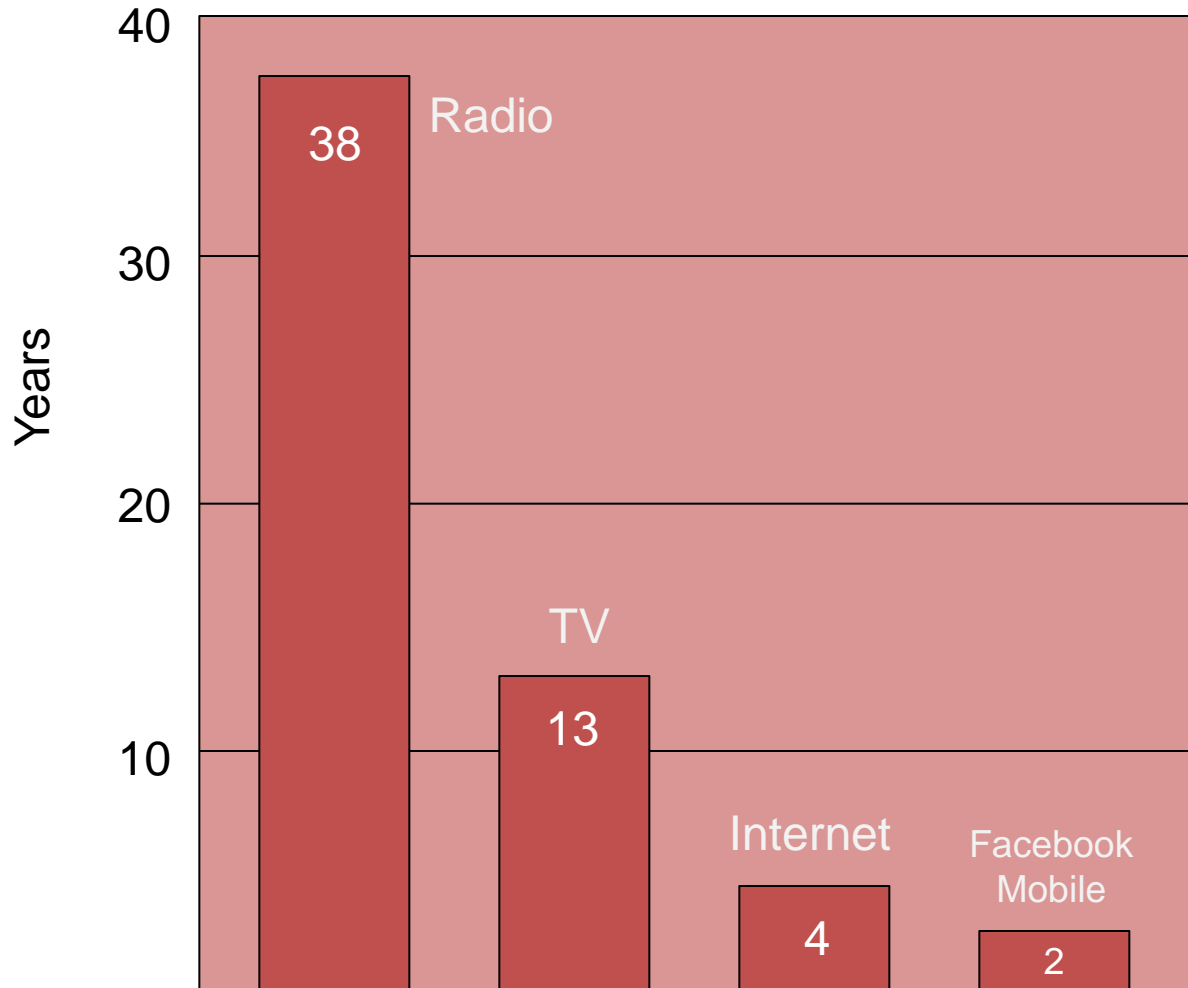


Why are we doing this stuff?

Some things never change...



While other things tend to change a lot...





Barack Obama
raised \$55 million
using email, facebook,
and twitter

In the last
president
campaign
McCain raised
million in funds
in the month of
February 2008...



What is the fastest way
to send money in
Africa?

...by mobile phone



Global trade = global competition



Image © <http://www.flickr.com/photos/hygienematters/4275577335/sizes/m/in/photostream/>



The context within which we do our development

Infrastructure : The Vision

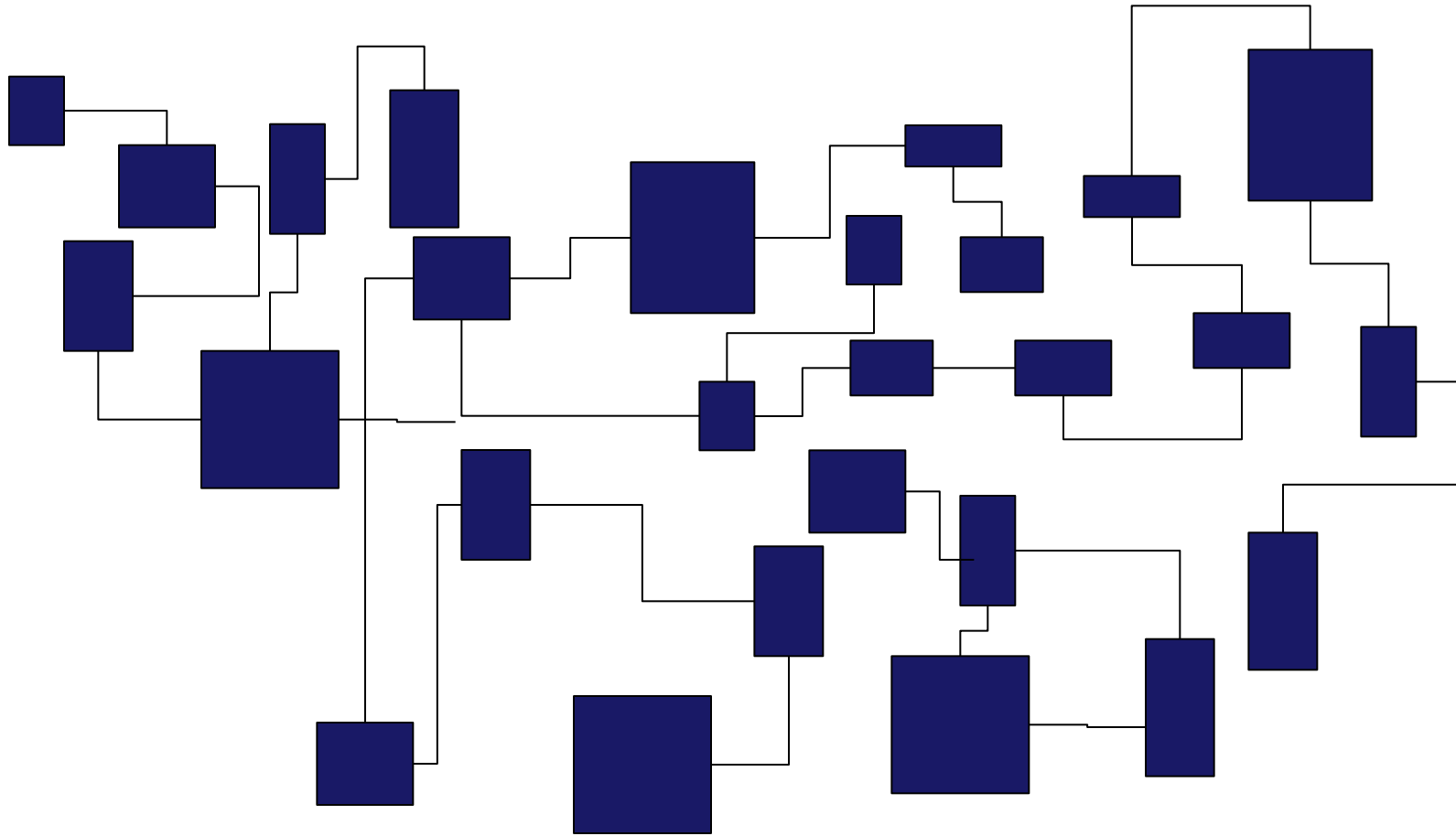


Image © Gary Barnett – and it took ages to get this right

All contents ©The Bathwick Group

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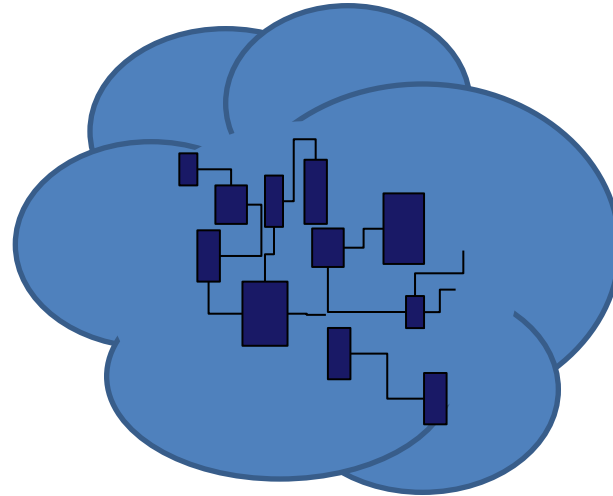
Infrastructure: Today



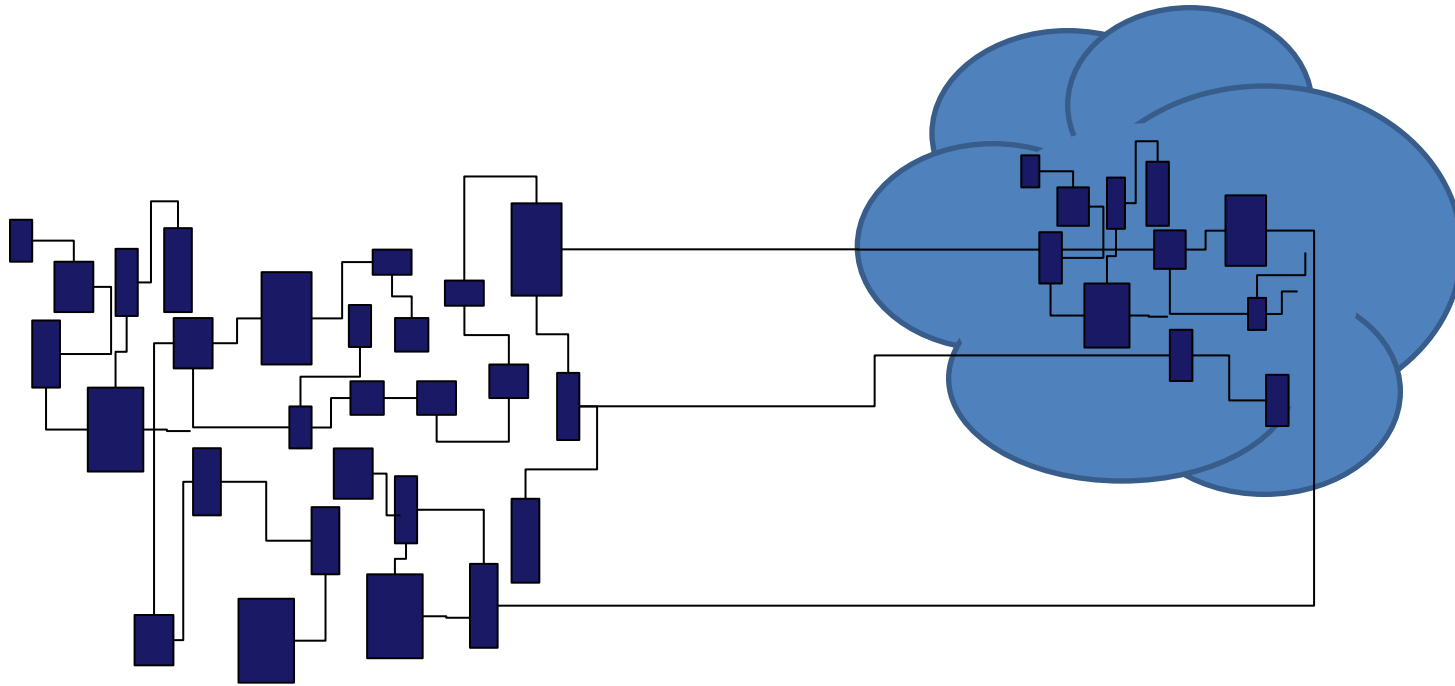
But don't worry Cloud is going to solve all of our problems...



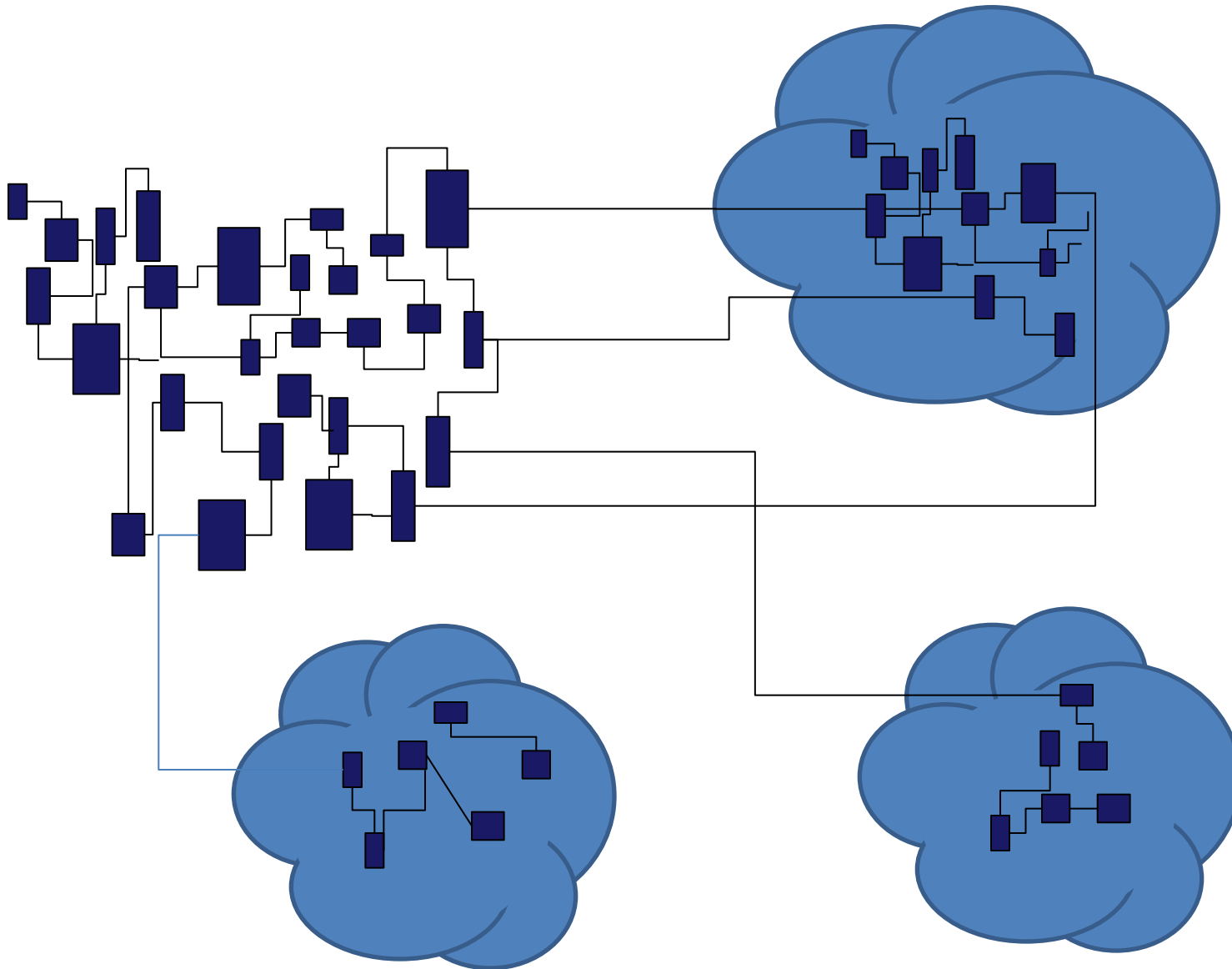
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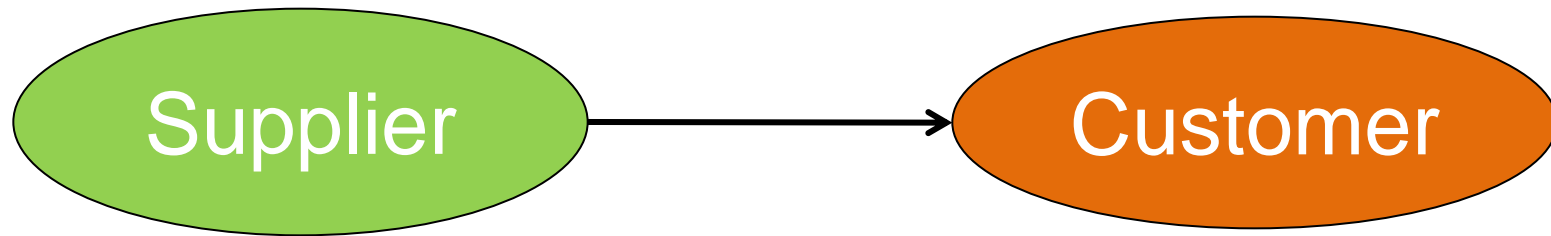


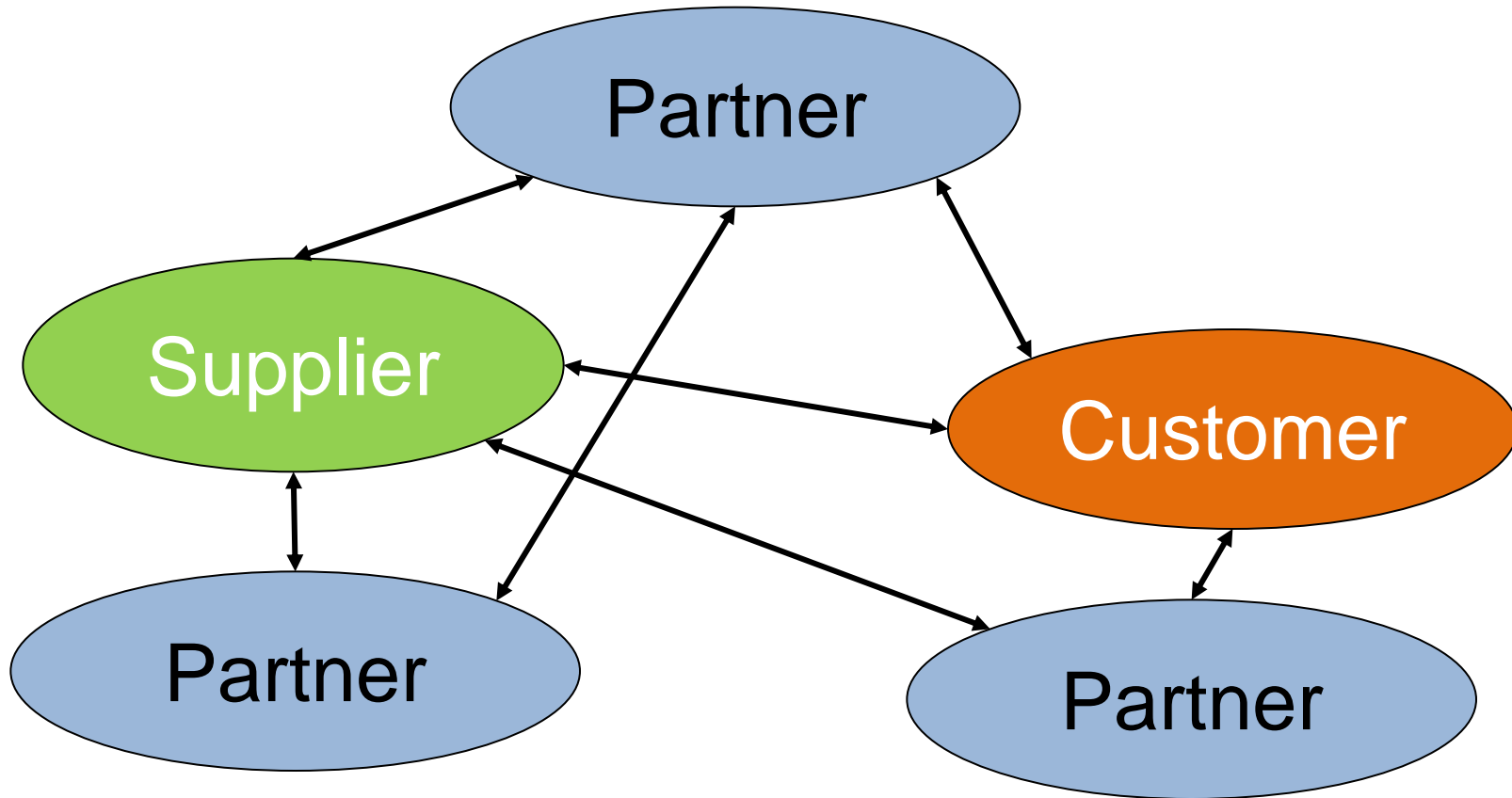
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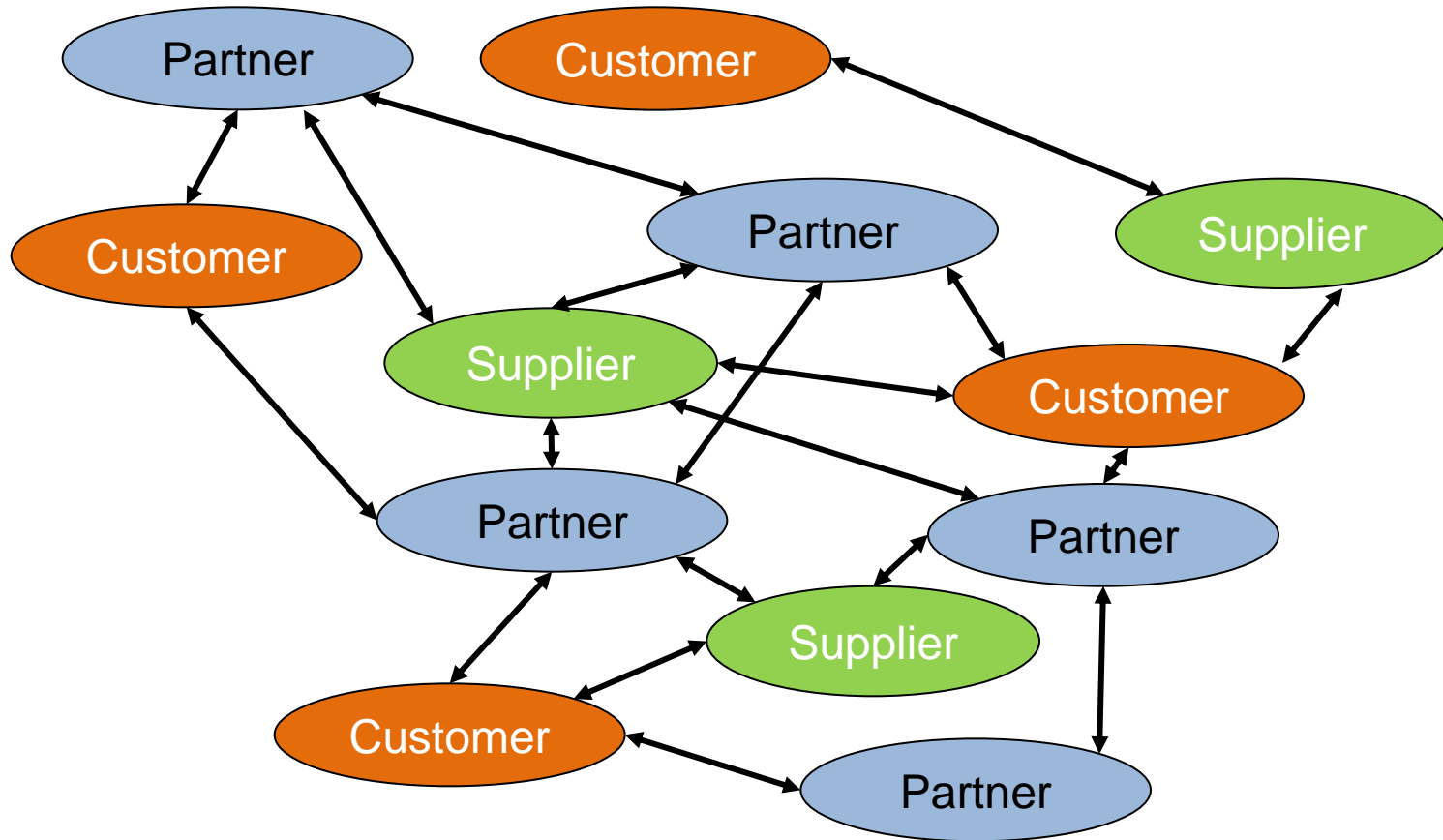


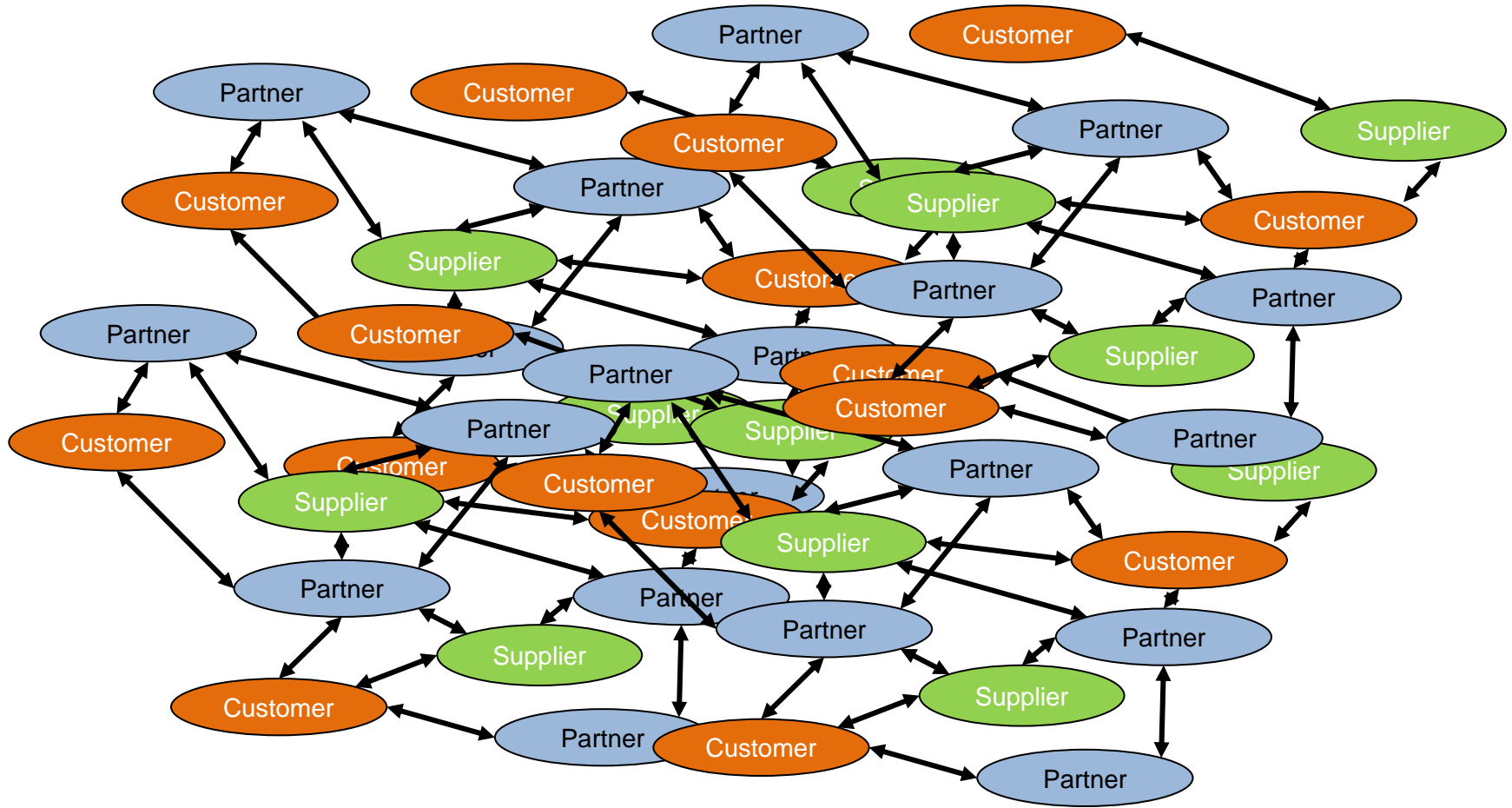
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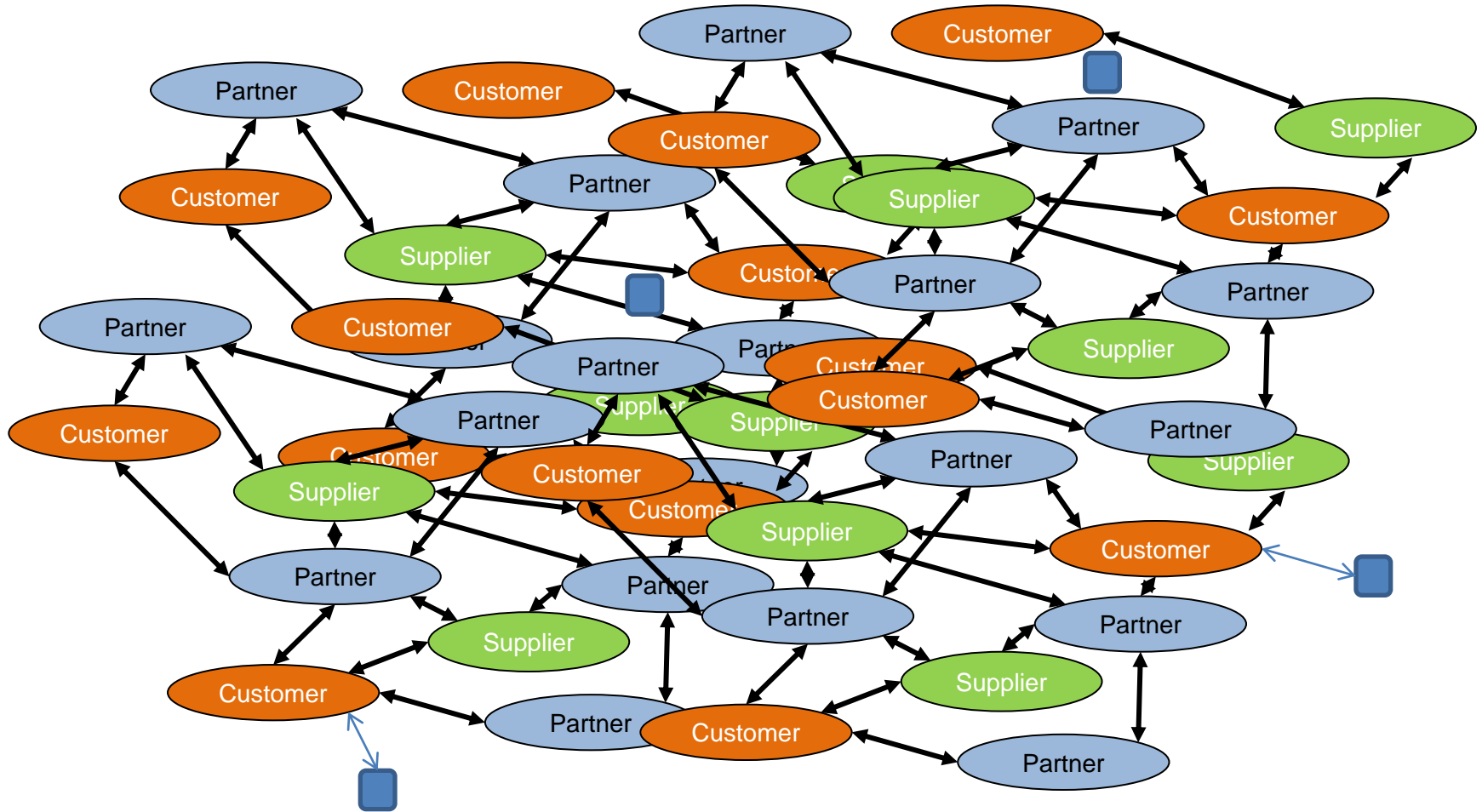


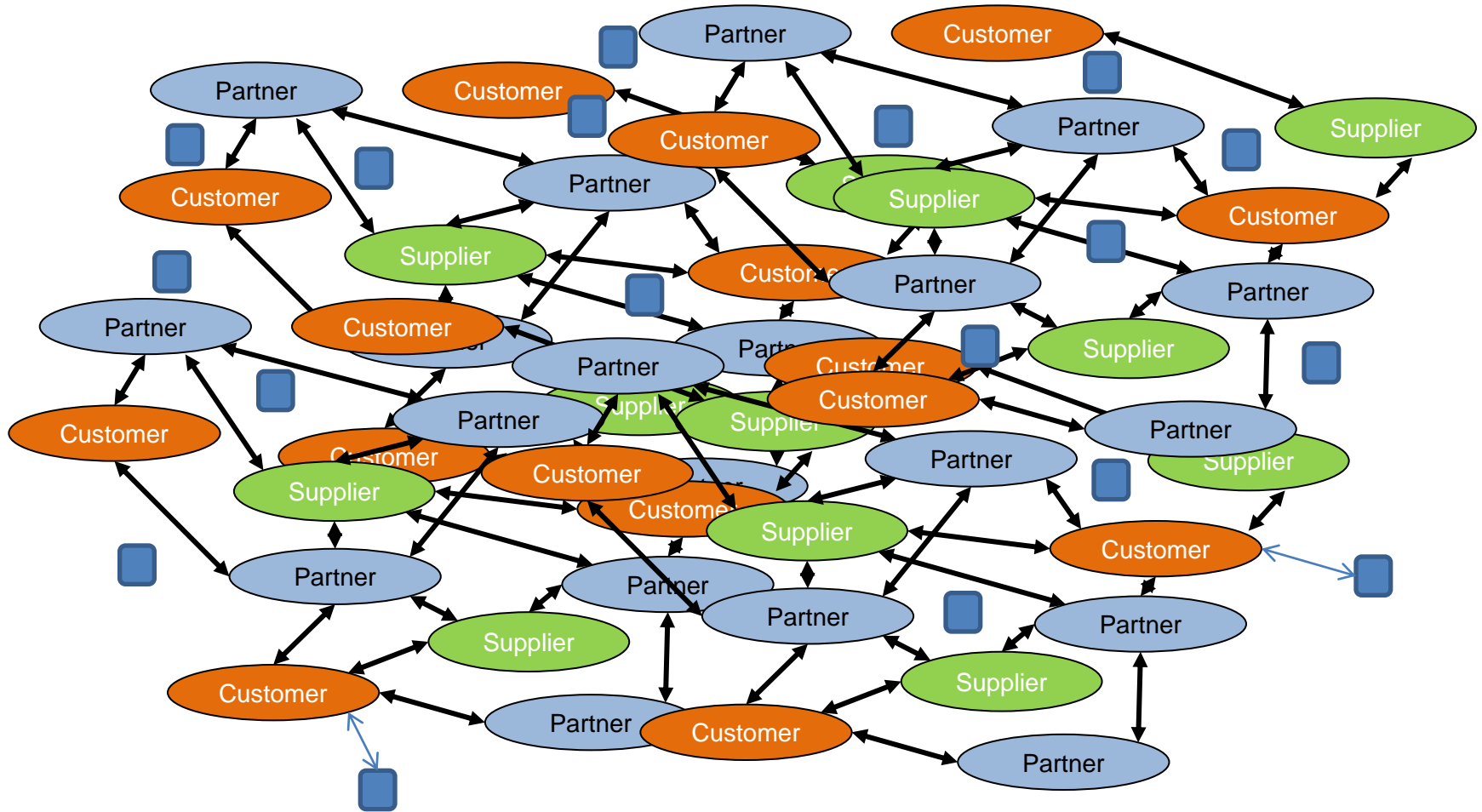


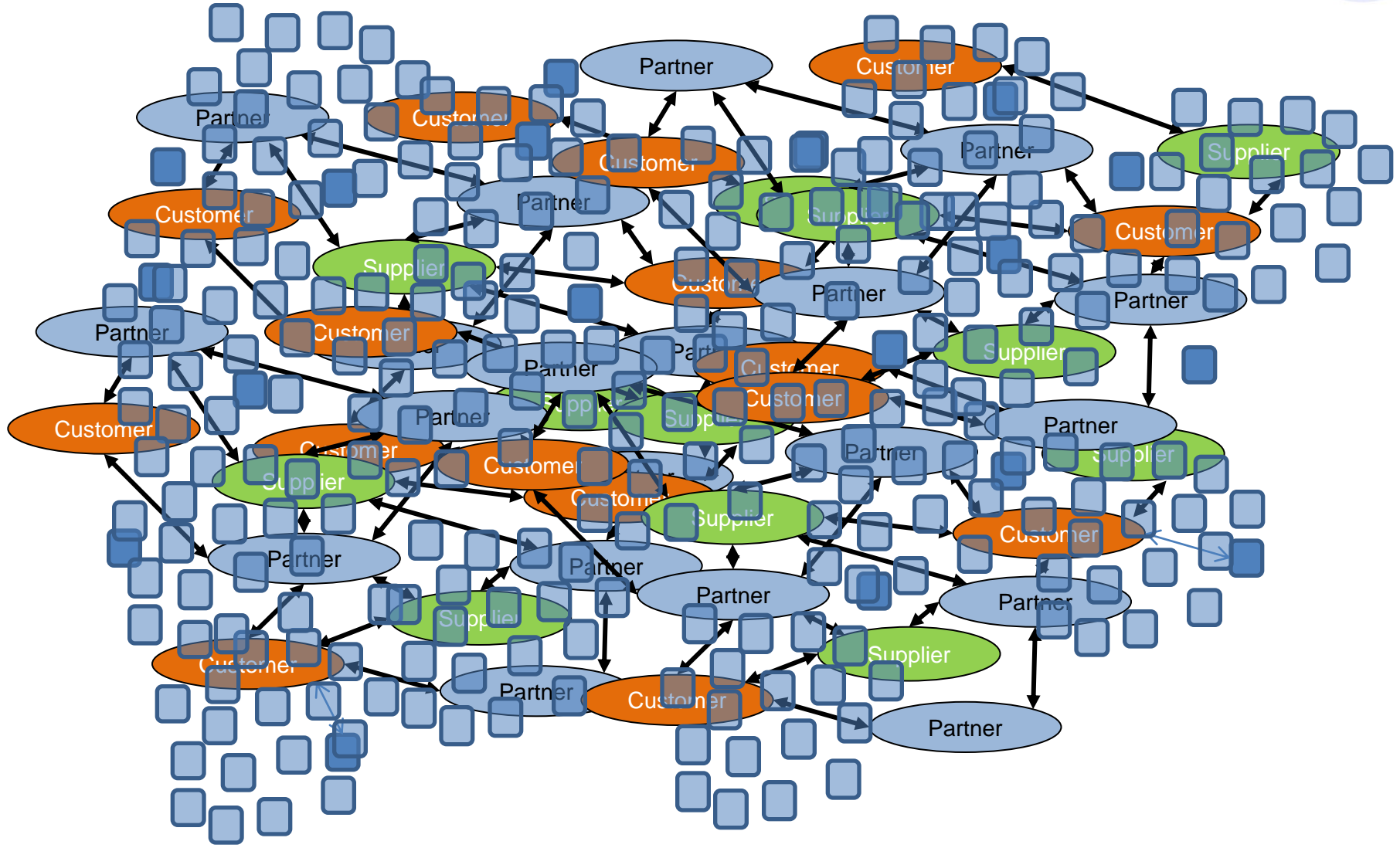












And these end-points are going to vary wildly...



mbed



And these end-points are going to vary wildly...



And some of them will give
you nightmares...

And these end-points are going to vary wildly...



And these end-points are going to vary wildly...



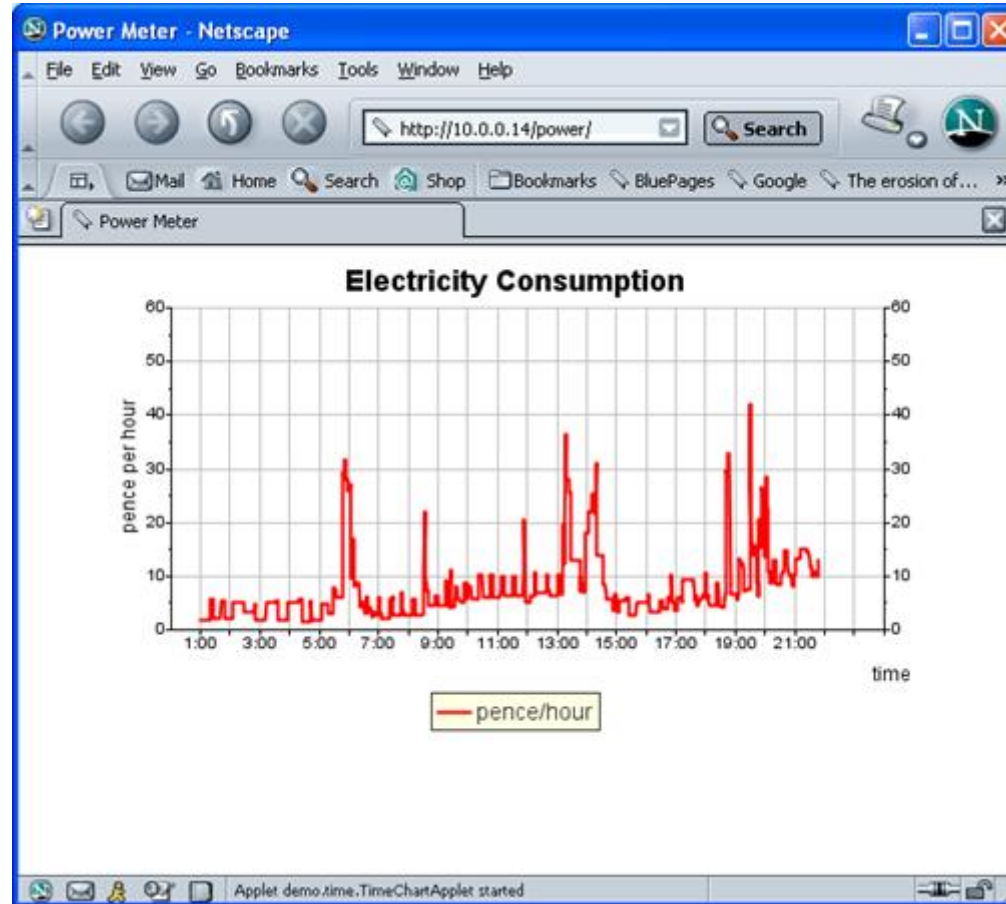
And some of them will make
you think

And these end-points are going to vary wildly...



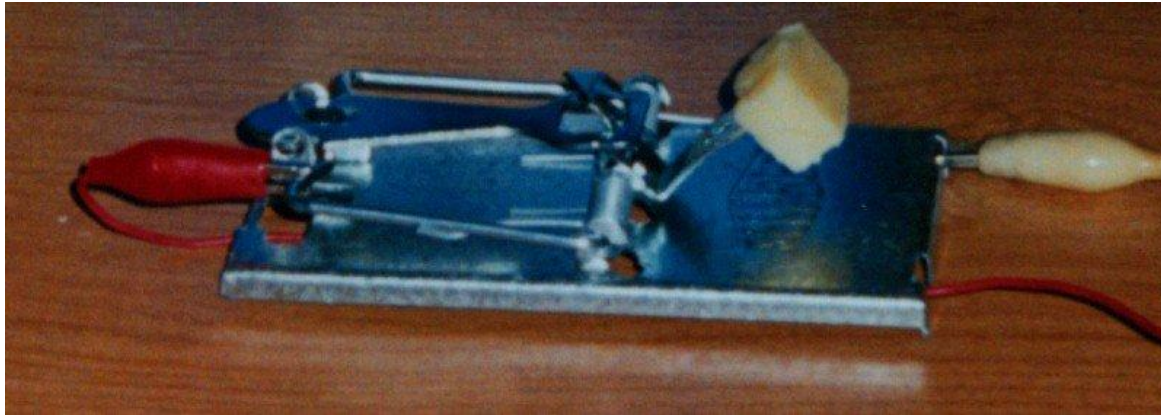
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And these end-points are going to vary wildly...



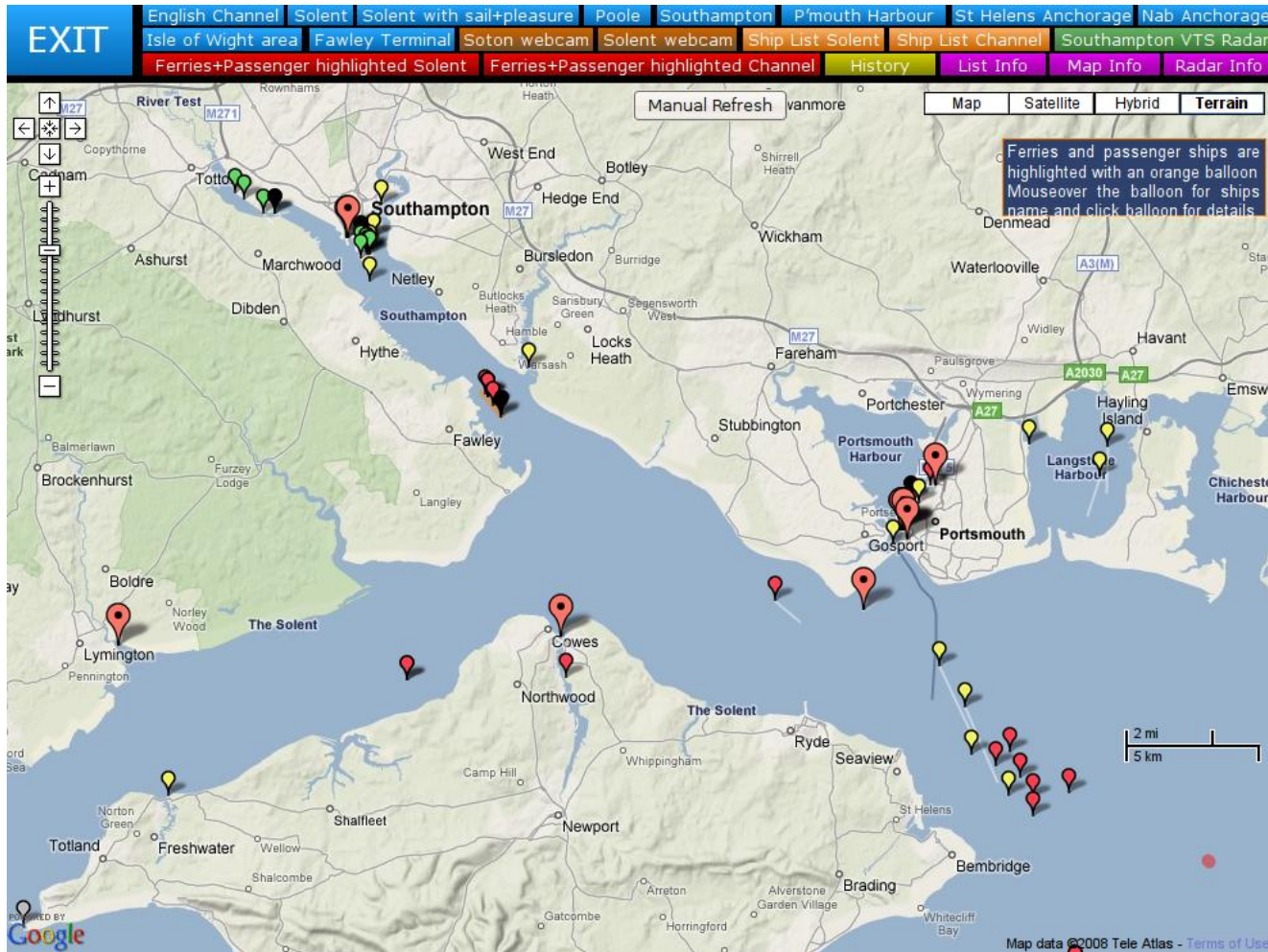
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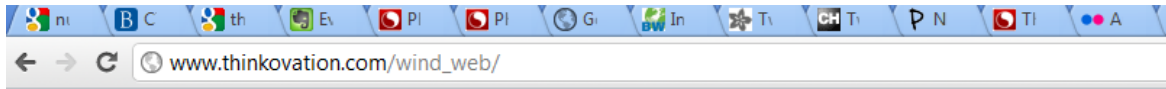
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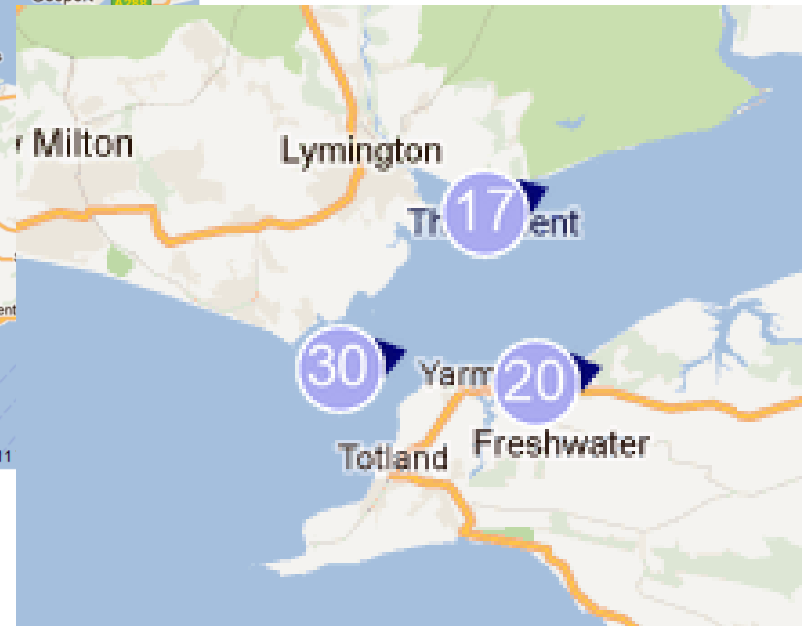
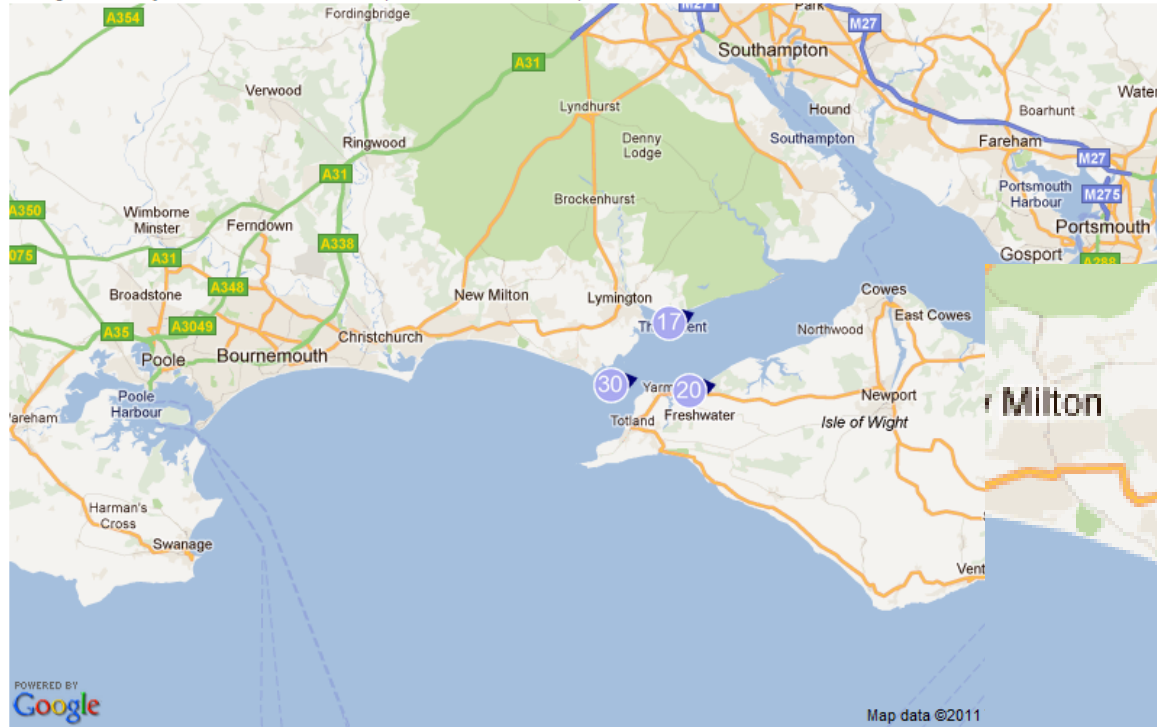
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And these end-points are going to vary wildly...



Wind data western solent

Data provided by Richard Paul Russell Ltd (www.weatherfile.com)

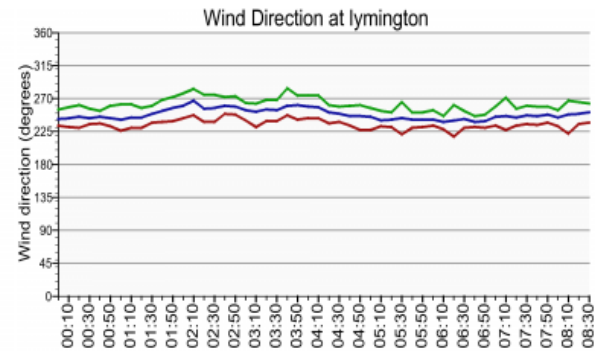
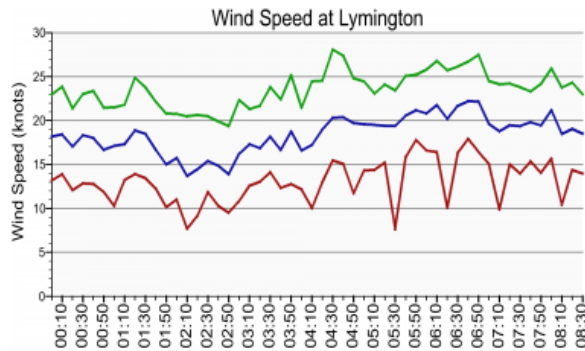
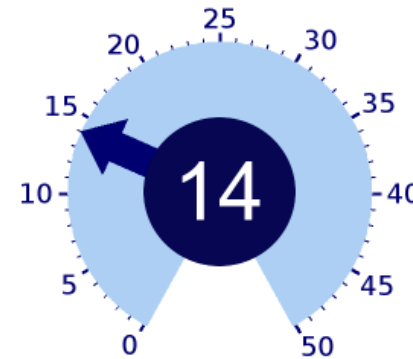
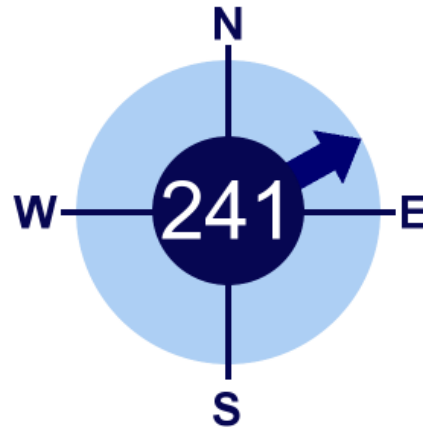


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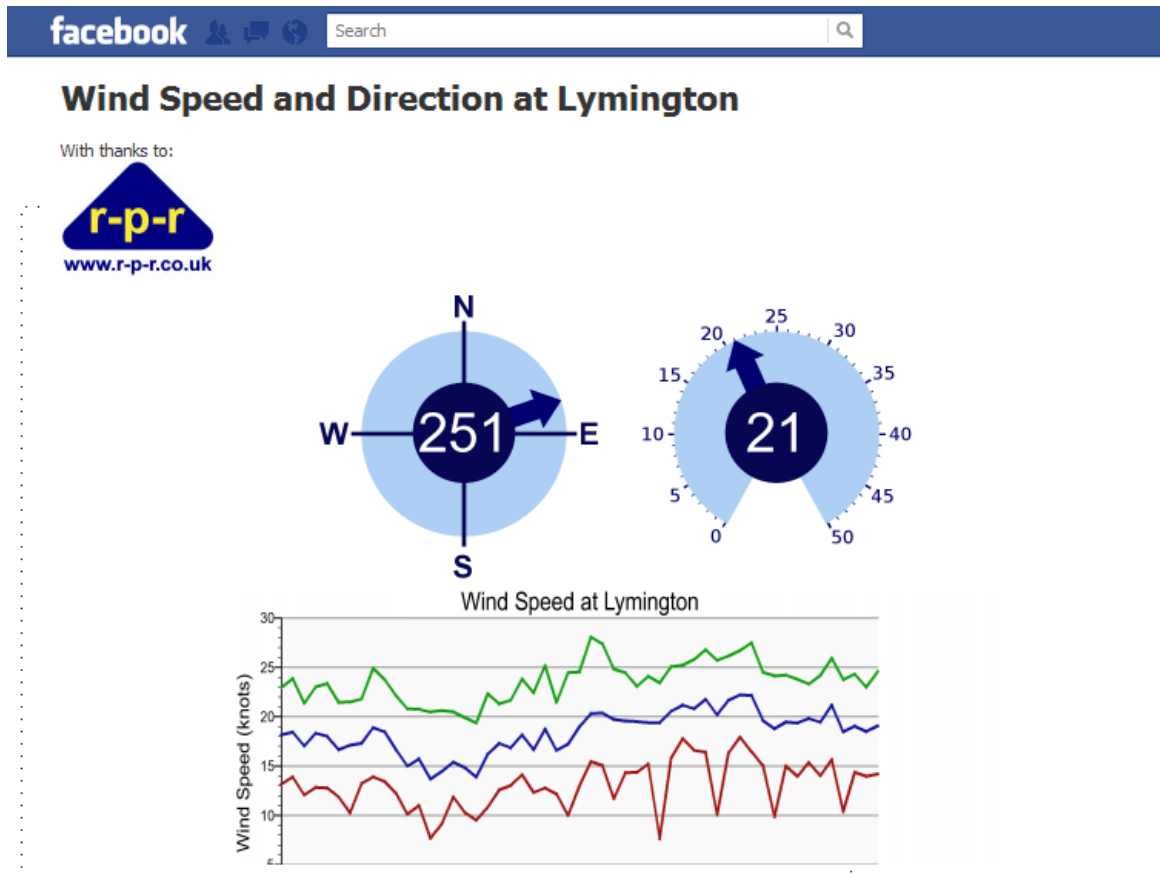


Wind Speed and Direction at Lymington



© Gary Barnett @thinkovation

And these end-points are going to vary wildly...

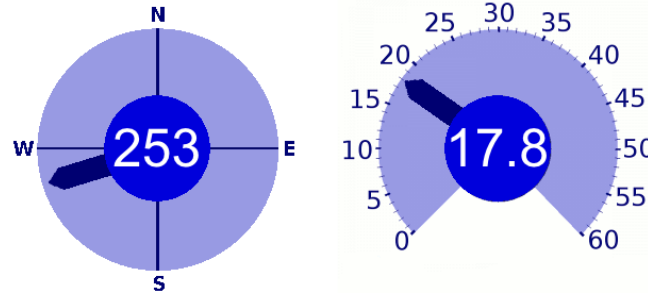


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O2-UK 08:37
Lymington wind data



Last updated 2011/10/11:08:37.02

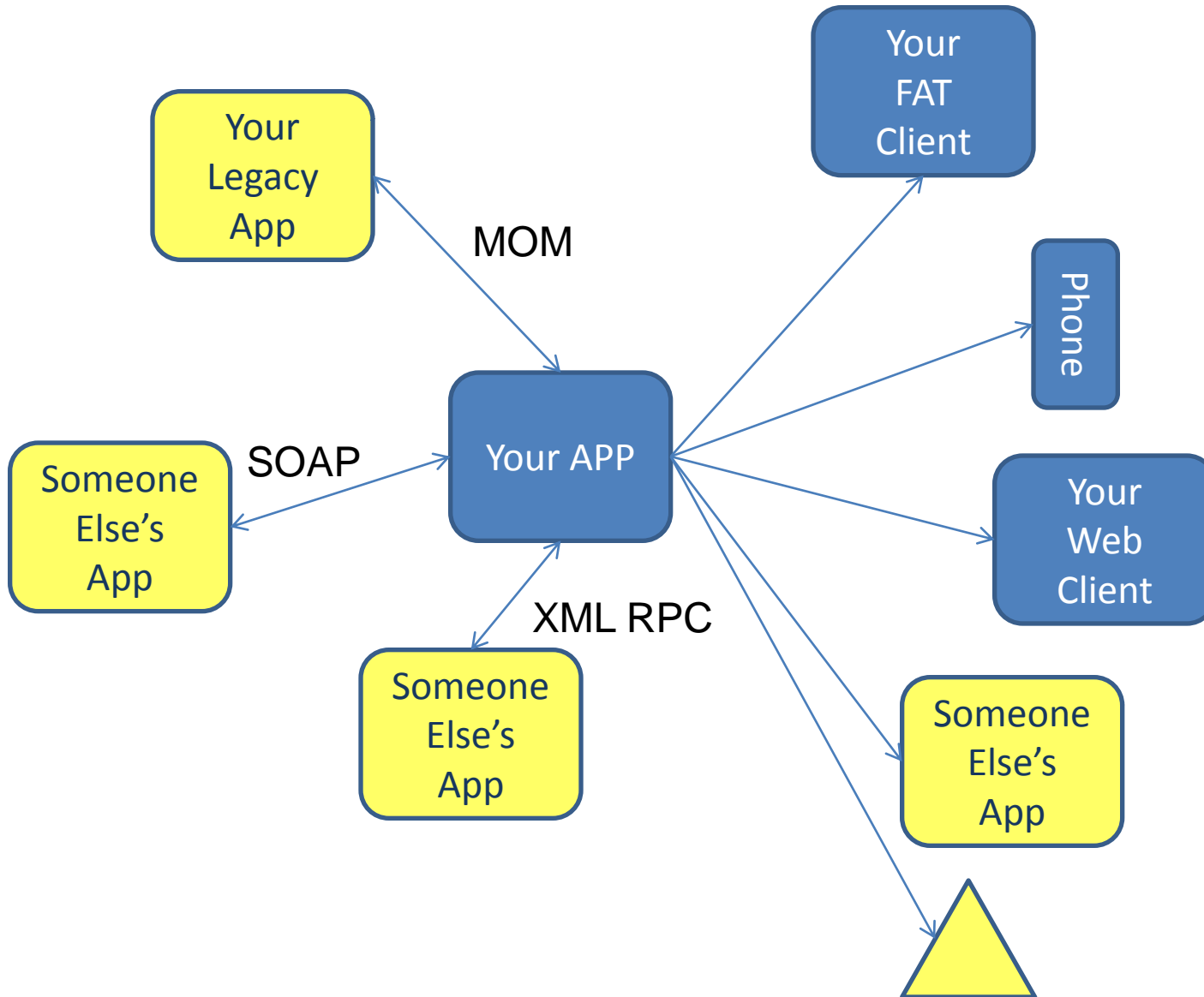
Wind for the last two hours

Time	Min Dir	Avg Dir	Max Dir	Min Speed	Avg Speed	Max Speed
08:30.00	237	251	263	13.96	18.49	22.98
08:20.00	235	249	265	14.35	19.03	24.3
08:10.00	222	248	267	10.4	18.46	23.73
08:00.00	232	244	254	15.65	21.17	25.91
07:50.00	237	248	259	14.02	19.44	24.16
07:40.00	234	246	259	15.36	19.8	23.31
07:30.00	235	247	260	13.96	19.36	23.79
07:20.00	233	244	256	14.99	19.44	24.2
07:10.00	227	246	271	9.86	18.77	24.12
07:00.00	233	245	259	15.05	19.62	24.49
06:50.00	230	239	248	16.44	22.15	27.49

Application (C) Gary Barnett 2010, Wind data (C) Richard Paul Russel 2010

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- We're entering a new era
 - That makes the challenge that client-server presented look like playing with stickle bricks
- Cloud computing is going to make things more complex, not simpler
 - If you think cloud computing will solve all your problems then you're mad
- The "A" in SOA is what will determine your success
 - One good software architect is worth 20 developers
- Interface design will become the most sought after technical skill in App Dev
 - Jedi interface designers are very, very rare



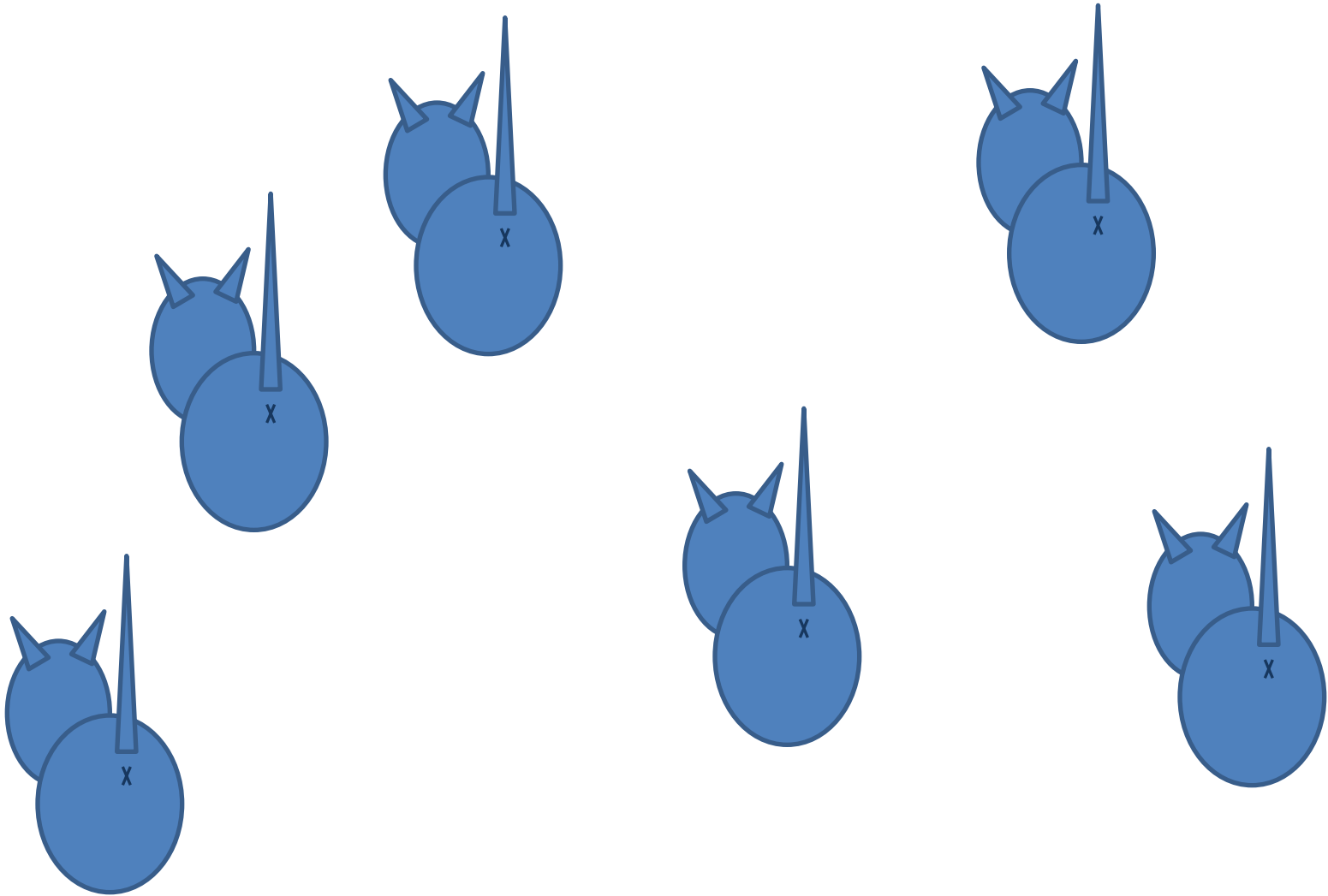
Can developers save the day?

About developers...

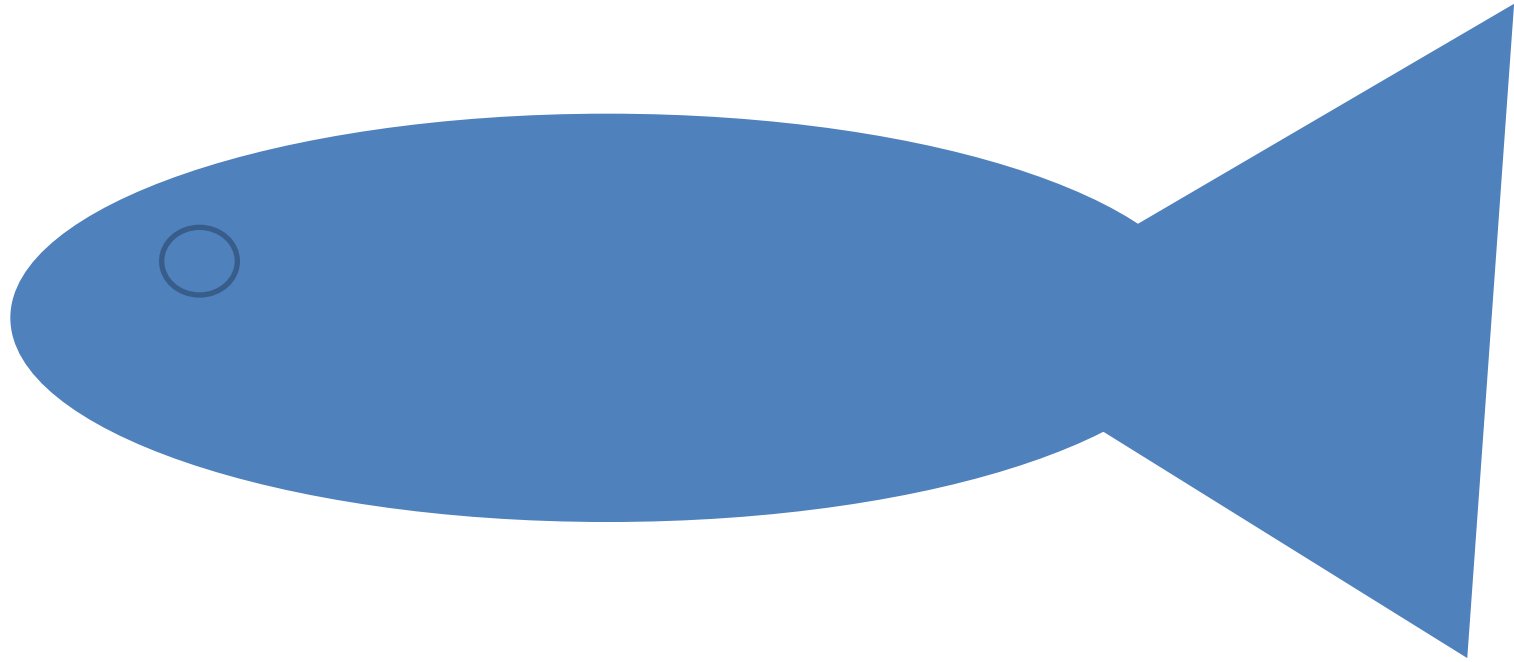


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Managing developers...



Managing developers...

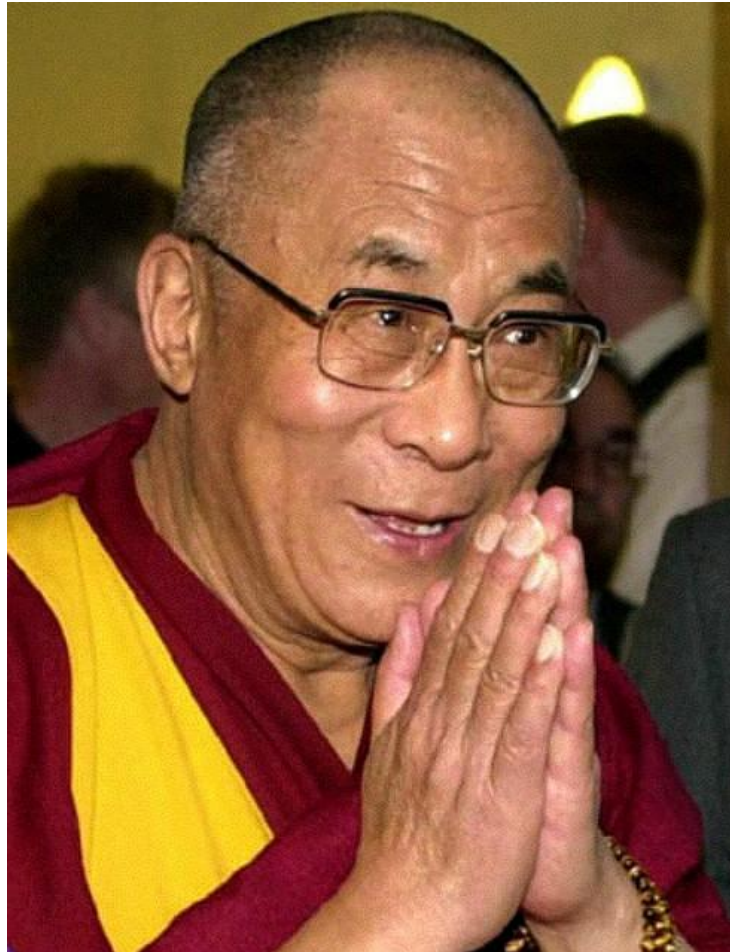


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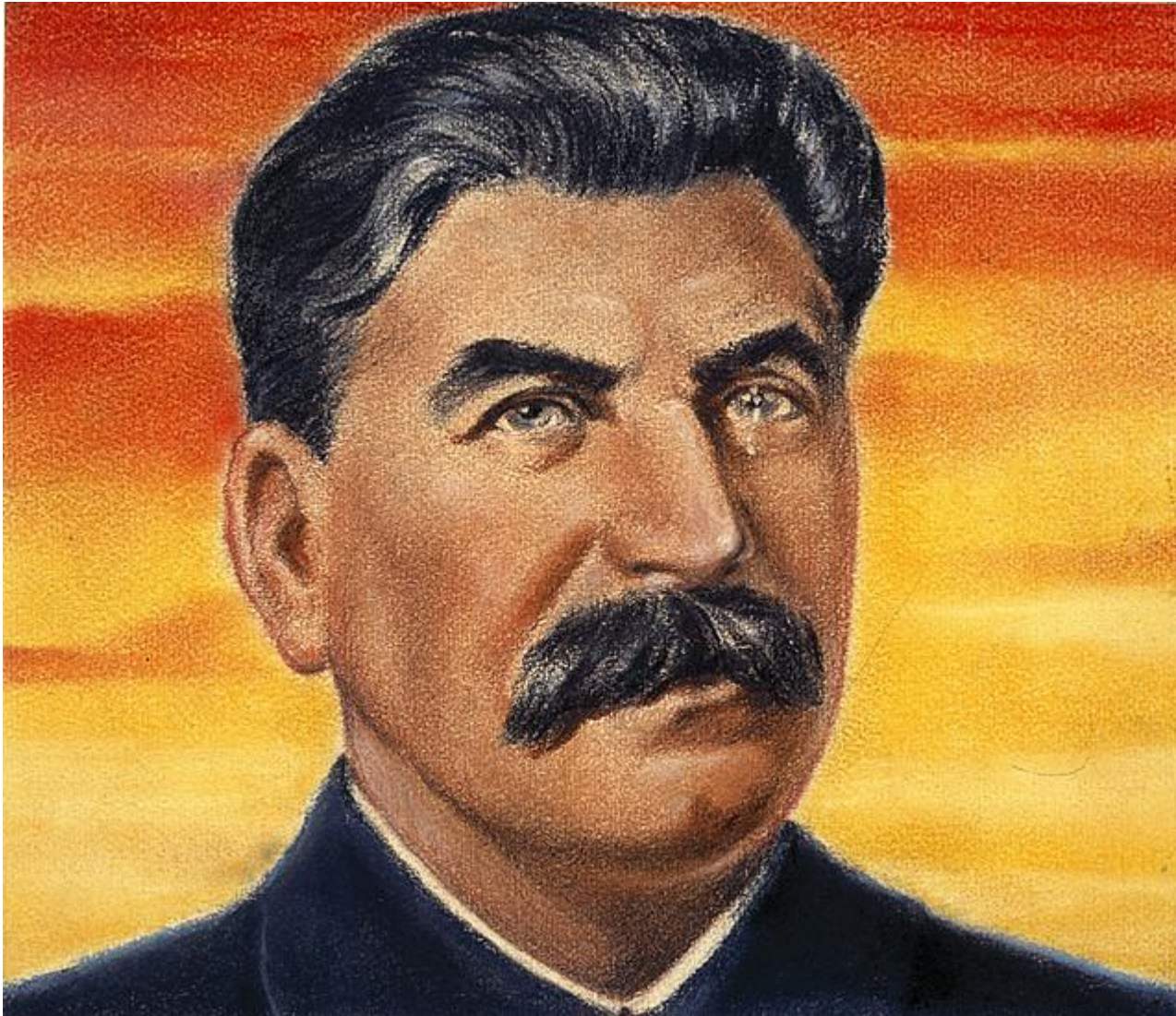
Managing developers...



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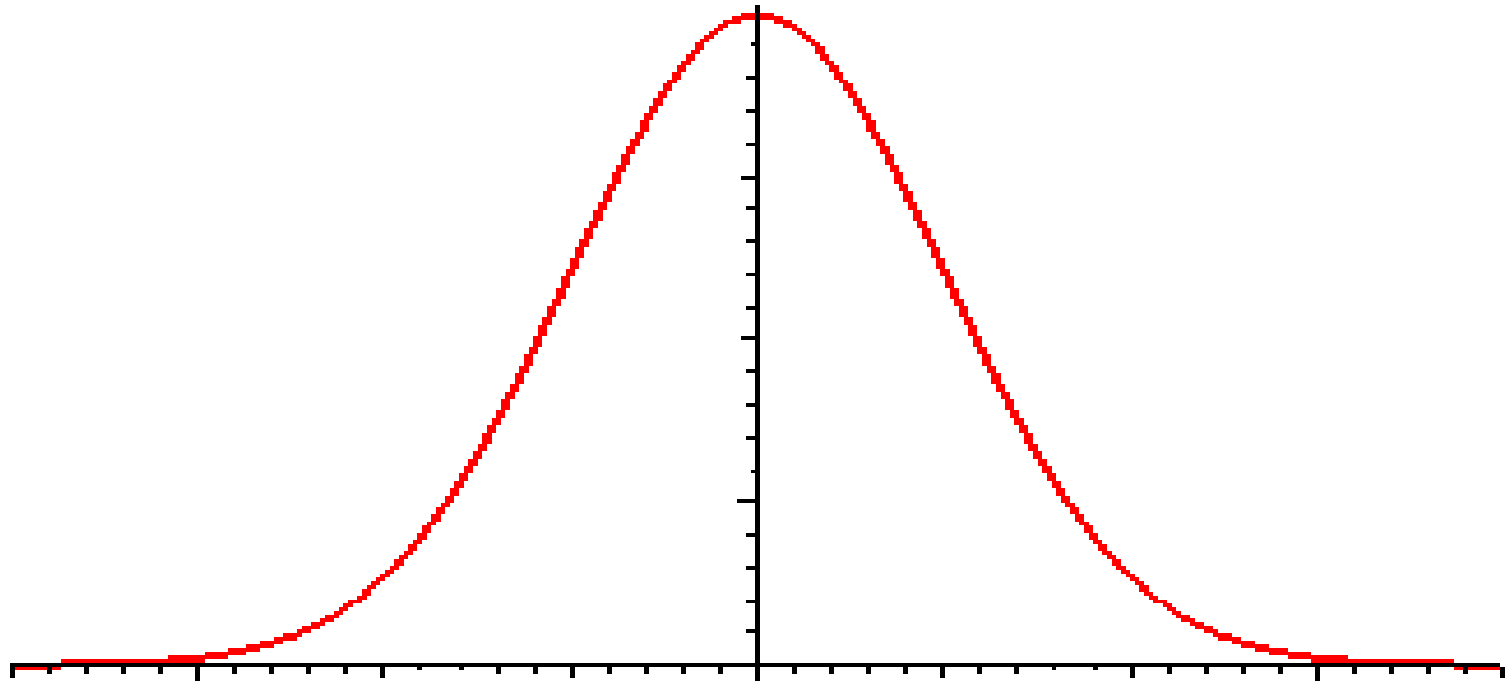
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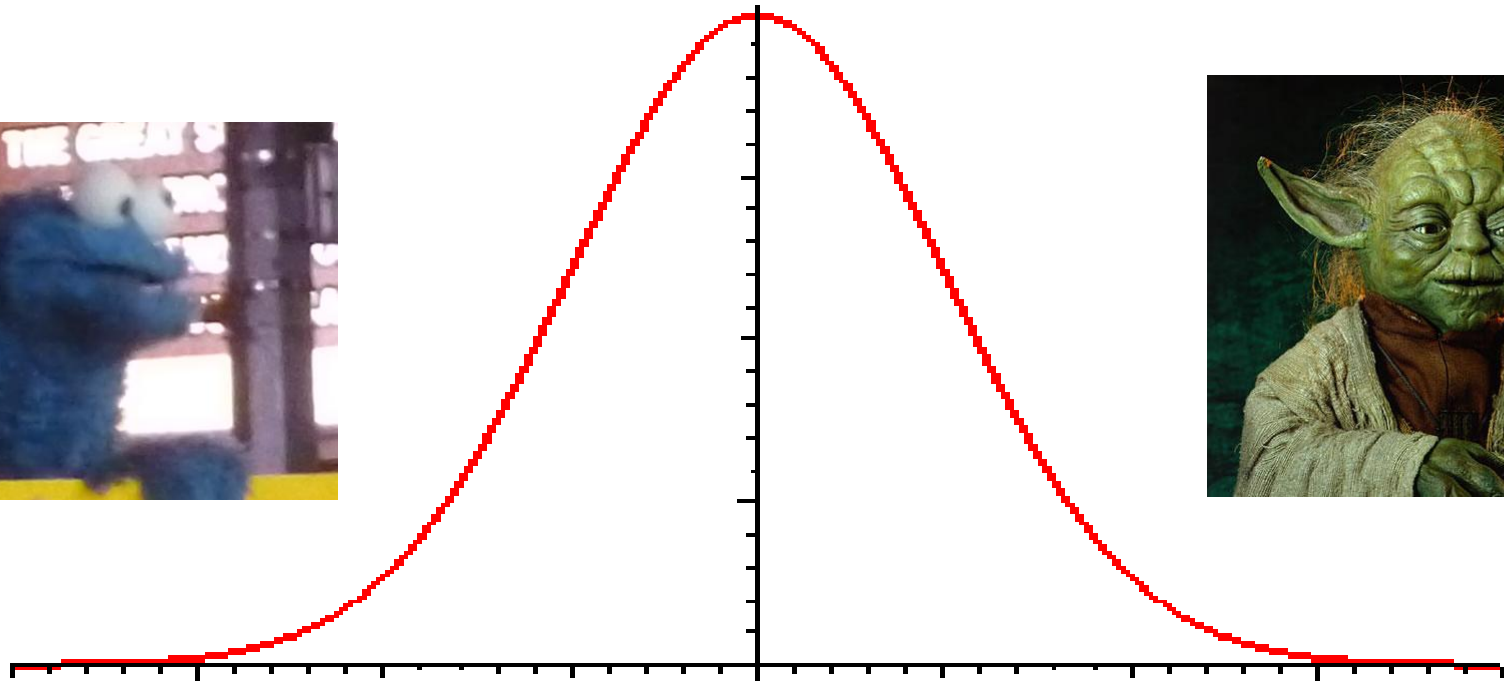


- Your approach to governance is fundamentally important
 - The key is to provide roots and wings (and the naughty step)
- The culture you create will make a huge difference
 - The level sharing, collaboration, on-task mentoring and (ultimately) success will depend on the culture you create or support





Managing skills



Mapping skills to project needs



GQ

Attention
to detail

Results
orientation

Collaboration
Skills

Passion

Creativity

Social
Skills

Learning
Skills



- Not all developers are created equal
 - But different tasks require very different skills
- Soft skills are as important as tech skills
 - Collaboration
 - Results focus
 - Passion
- You don't need a stable full of Jedi developers
 - And let's face it, at times, they can be the most irritating people on the planet



Can development tools save the day?



- Choice of project manager
- LOB Buy-in, involvement
- Architecture complexity
- Corporate politics
- Legacy

Technology is only a part of the solution



www.MAURICEROBINSONSPORTS.com





The rest is down to you....

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