

WaPUG Keynote 11th November 2010
Innovation and Collaboration the way forward
Ian Noble Contracts Director Optimise



CUSTOMERS WILL CHOOSE THAMES WATER BECAUSE OF OUR PERFORMANCE

Who makes up the Optimise Joint Venture

JV Partners for delivery to Thames Water

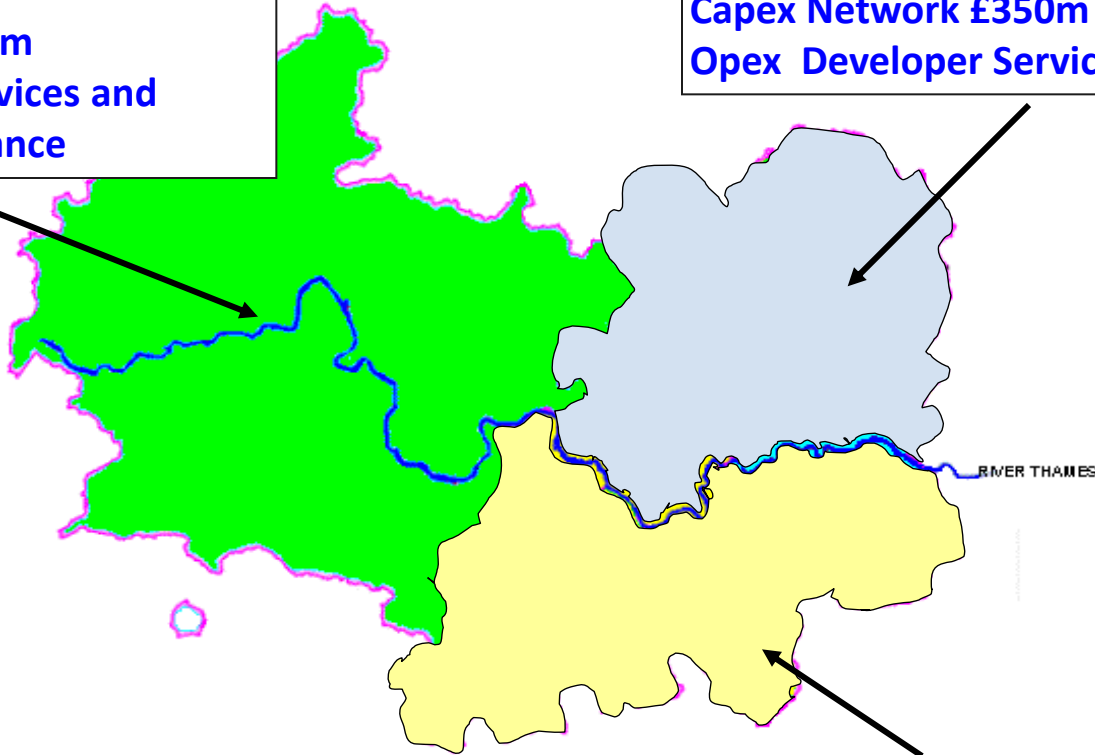
- J Murphy and Sons
- Clancy Docwra
- MWH

Design and environmental support from AECOM

The Optimise Contracts

Thames Valley
Capex Network £200m
Opex Developer Services and
Repair and Maintenance

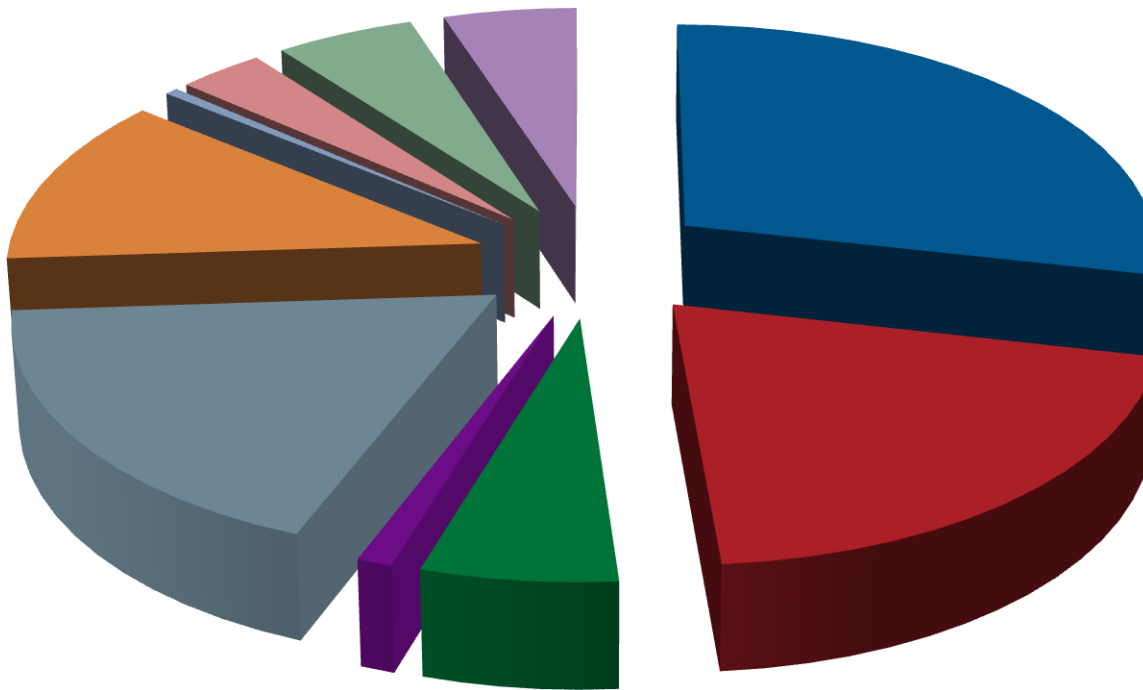
North London
Capex Network £350m
Opex Developer Services



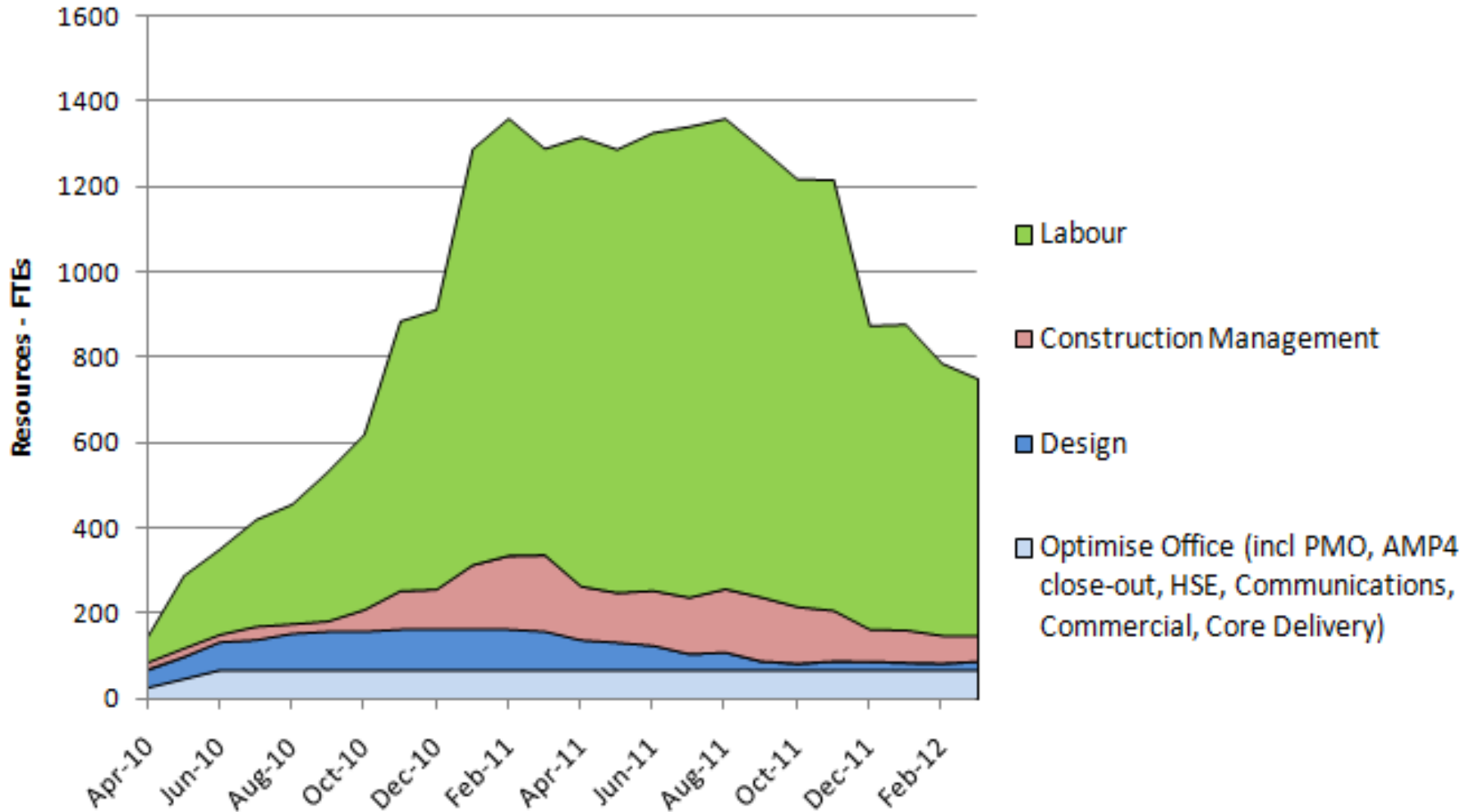
South London
Opex Repair and Maintenance

The Capex Contract

- Flooding 29%
- Wastewater Network 20%
- Reservoirs 6%
- Network Storage 1%
- VMR 18%
- Trunk Mains 12%
- Water Pumping Stations 1%
- Sewage Pump Stations 3%
- DMR 5%
- SCADA 5%



Capex numbers of People



Opex Contracts

Repair and Maintenance

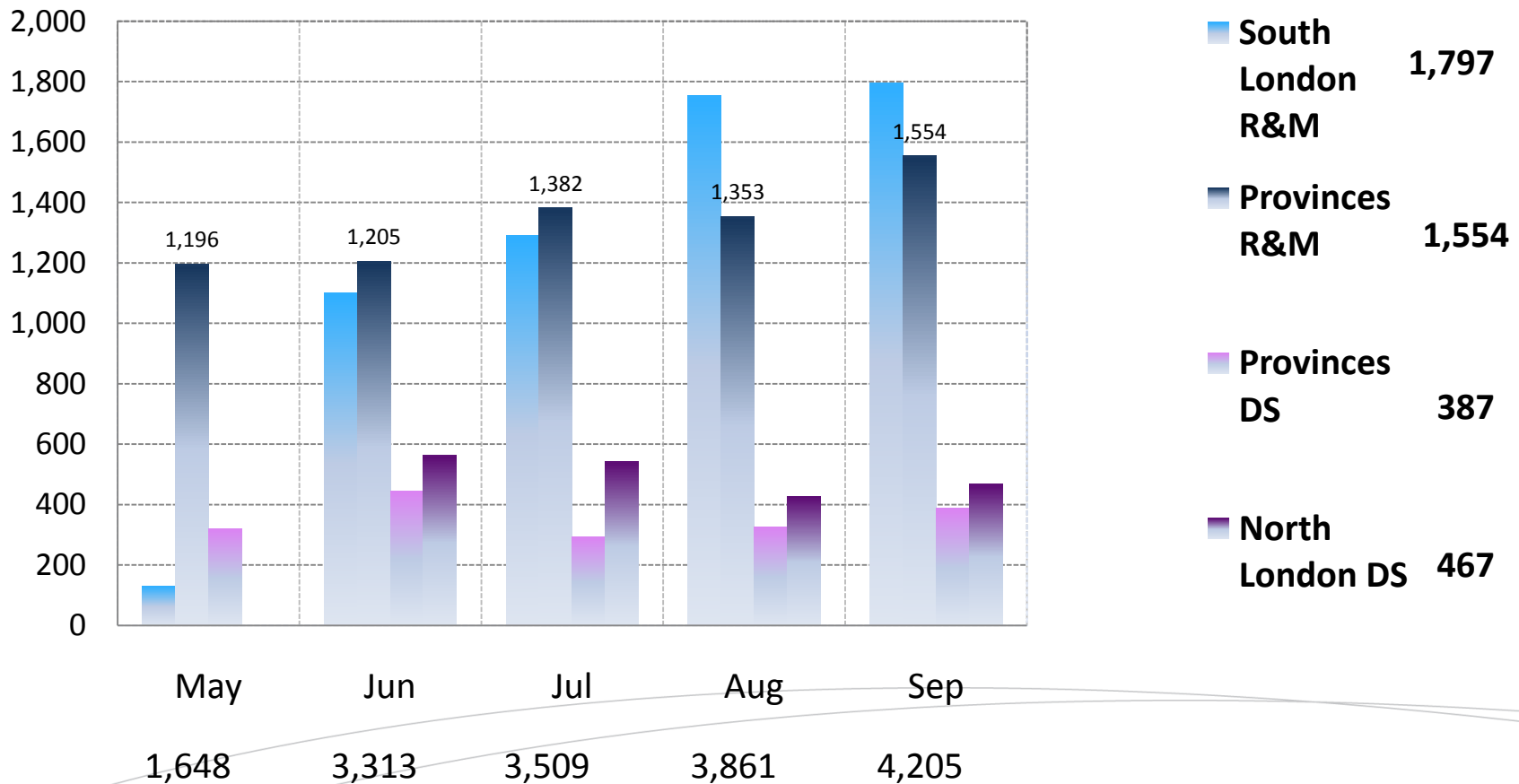


Developer Services



Opex - Outputs (September 2010)

Outputs (month)



Opex – Teams and People

(September 2010)

Area	Contract	Teams	Reinstatement	Total
South London	Repair & Maintenance	32	11	43
Provinces	Repair & Maintenance	34	7	41
Provinces	Developer Services	17	2	19
North London	Developer Services	14	3	17
Total		97	23	120

Activity	Number
Total Teams	120
Total Staff	109

2 person Teams
Total of 350 People

How does Optimise drive innovation through organisations like WaPUG

This is important for WaPUG because a lot of AMP5 delivery is through arrangements like Optimise.

- They are contract specific
- They are transient set up for an AMP period (Plus extension!)
- Does WaPUG engage with the individual parties or the whole
- They have a lot to do in a short space of time rapid set up
- They are involved in big capital spends and incentivised to save on capital spend.
- Innovation savings go straight to bottom line

optimise 

**Looking forward learn the lessons
of the past**

Innovation in WaPUG

Customers will choose Thames Water because of our performance

Innovation and Collaboration in WaPUG

Achievements in the early years

- 25 years of innovation and challenge for the water industry
- Held up as an example of how to collaborate and innovate to the Cave Review in 2009
- Started with User notes produced quickly usually from papers on how to do things
- This lead industry Codes of Practice but under sponsor ship of WSA , published by Water Research Centre with input from WaPUG members
 - First edition Modelling COP in 1993, 2nd Edition 1998

Innovation and Collaboration in WaPUG

The you are on your own Phase

- With the demise of Sewerage Working Group WaPUG went alone, became self financing.
- Started to issue guides to help with new techniques
 - These were produced and published by WaPUG
 - River Data Collection Guide 1st Edition 1998
 - River Modelling Guide
 - Modelling COP 3rd Edition 2002
 - Design of CSO Chambers to incorporate Screens 1st Edition 2001, 3rd 2006
 - Guide to the Quality Modelling of Sewer Systems 1st Edition 2006
 - Integrated Urban Drainage Modelling Guide 1st Edition 2009 but living document with 6 monthly reviews

Innovation and Collaboration in WaPUG

Collaboration

WaPUG has collaborated for many years with FWR Wastewater Research & Industry Support Forum, workshop outputs.

- [The Urban Flood Route Prediction - Can We Do It?](#)
- [Design Criteria & Performance Standards for Urban Drainage Systems - Is Historic Practice Still Good Enough?](#)
- [Urban Rainfall & Run-Off](#)
- [CSO Screens - A Design and Installation Review](#)
- [Urban Run-Off Modelling - Why Not Do It Properly?](#)
- [Action Workshop on Urban Run-off Modelling Why Not Do it Properly?](#)

Innovation and Collaboration in WaPUG

The CIWEM Phase

WaPUG joined with CIWEM to give it more political influence and to allow more efficient communication with a wider membership

- Workshops in 2010 on
 - Overland Flow Modelling
 - Urban Drainage Risk Mapping
- These workshops characterised by
 - much wider stakeholder involvement
 - Better prioritisation of what needs to be done and when
 - Better prioritisation in who takes the lead WaPUG, Defra etc
- Still with that WaPUG sense of urgency
- Still promoting user notes to get stuff out quick

Innovation and Collaboration in WaPUG

Lessons Learnt and Successes

- Stakeholders brought into production of guides
- Driven by the industry
- Speed of production, draft working versions widely used
- CSO guide a huge success recognised by OFWAT
 - 80% reduction in chambers sizes achieved
- WaPUG gets to critical mass quickly,
 - gets on with it
 - Momentum wins

“The best way to predict the future is to invent it”



optimise

The Future

The need for change in how we innovate

Customers will choose Thames Water because of our performance

The future

The need for change in how we innovate

- Cave report identifies issues preventing innovation.
- Penalties for failure outweigh rewards for success
- We want tried and tested innovation
- No body wants to go first
- “if it’s such a good idea why don’t you do it on the jobs you do for us you are a big company” *spring meeting 2010*

What do we need to do ?

The future

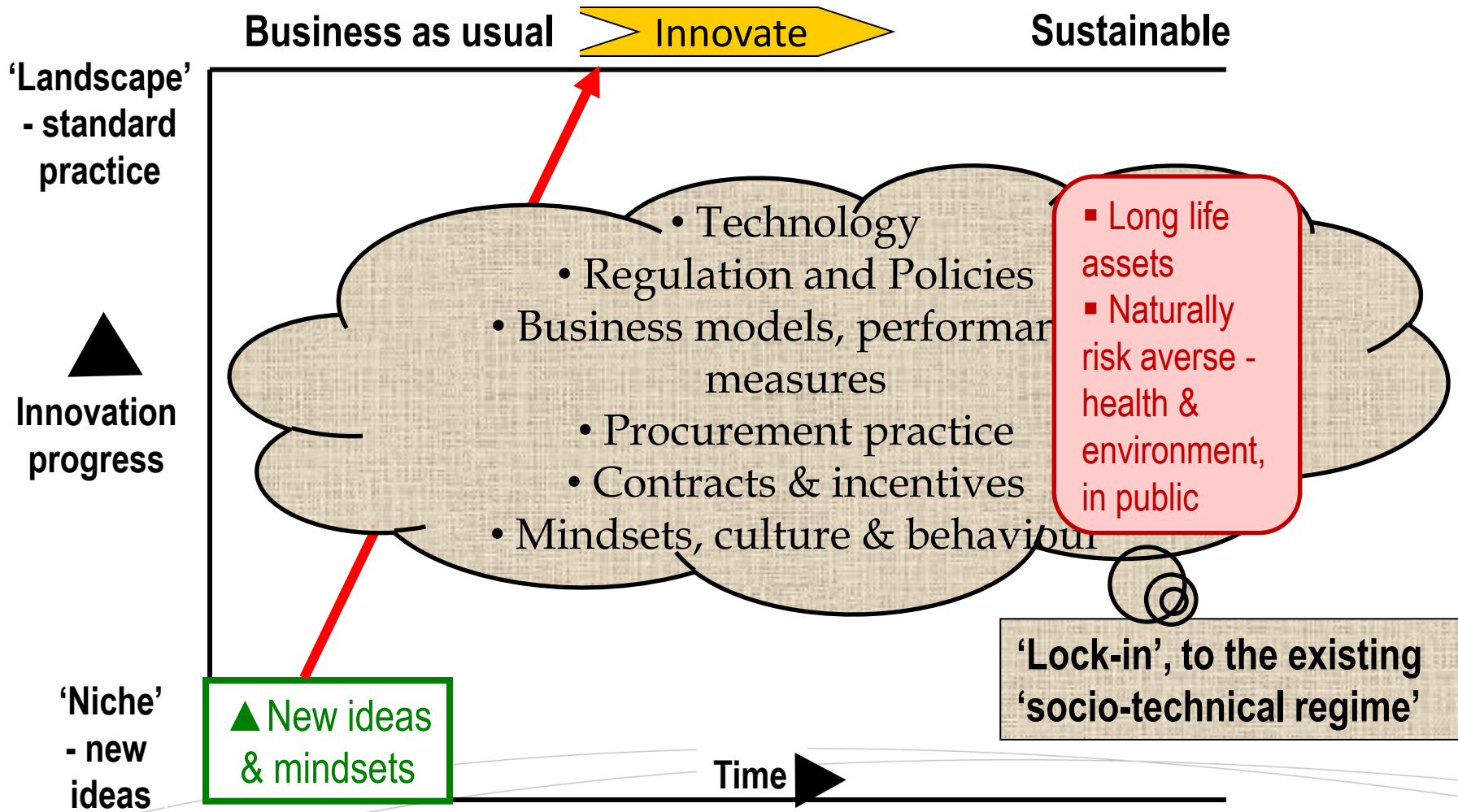
The need for change in how we innovate

**if in doubt go and speak to some body
very clever**

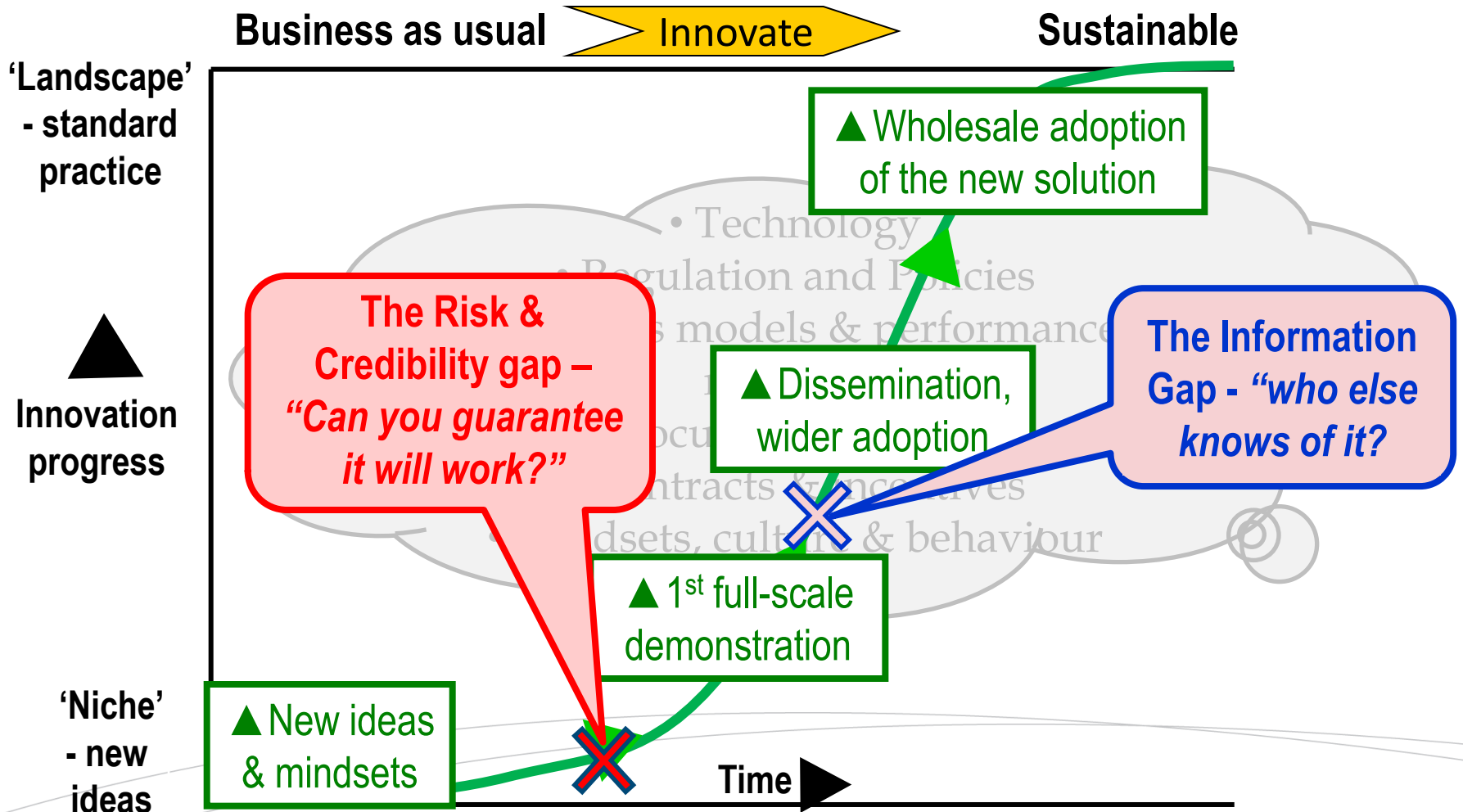
And pinch their latest slides

Or go to a WaPUG workshop

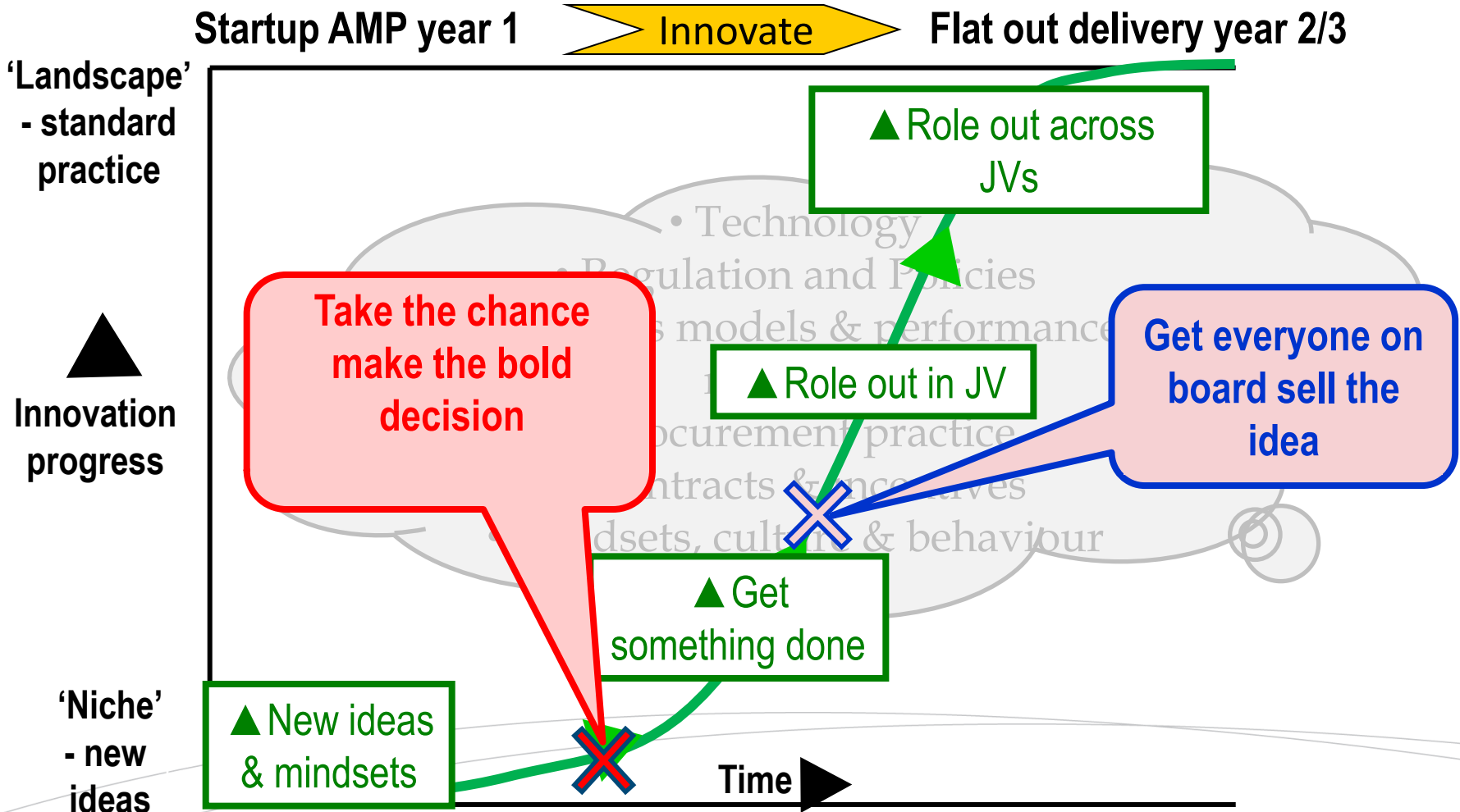
How can we make innovation progress ?



The innovation 'marketing' / 'tipping point?' - curve?



How would that look for Optimise with in AMP Cycle delivery



Crossing the 'credibility' and 'information' gaps...

- **Risk/credibility:** the killer questions..? *'can you guarantee it will it work?'* ; *'can you prove it's better/more effective than existing practice?'*
- > **Create 'Experimental space' & mind-set** – *learn co-operatively, together?*
- ▼ do a 'what-if' desk study (*before* any commitment), to test business case justification;
- ▼ do a small-scale pilot project, acknowledged as 'experiment';
- ✓ 1st at-scale demonstration project .

- **Information:** *'who (else) knows of it?'*
- > **Speed up shared reporting, analysis?** – *can we do this jointly?*
- ▼ commitment to *share*, early – **not** hold back for competitive advantage?
- ▼ early, authoritative, *reporting* of 1st demo project & its results,
- ▼ generic *analysis* of 1st result, for *synthesis* for other situations
- ✓ Dissemination of 1st results > wider take-up > then wholesale adoption

The future

Collaboration with WaPUG

- WaPUG does all the stuff on the last slide
- Sit in on an R and D workshop and you see it
- WaPUG is a great model for doing this
- Going forward
 - we need to touch more people
 - Influence at higher level
 - Get stuff out quick or quicker
 - Get construction delivery organisations involved

The future

What is the landscape

- Jobs will get smaller and smaller with each AMP
- Difference between capital spend and operational and maintenance spend will blur
- Need to demonstrate more efficiencies
- We cannot afford to do things the way we always have
- Growth in localised solutions
- More community ownership of solutions
 - “Dig for victory” approach to SUDS
- Water pricing as well as carbon pricing
- Can we be more risky with little jobs, lots of little solutions don't all need to work 100% to get a good outcome.



The future

What am I being asked for at Optimise

- Better cheaper solutions
- Cannot do it the way we always have
- Collaborate and share with
 - The Client
 - Other delivery organisations (the big one is shared learning)
 - The Supply chain
- Standard ways of doing things with factory assembled products
- Get to frontier efficiency
- Delivery organisations playing their part

The future

Collaboration with WaPUG

- My commitment to WaPUG
 - Initially as an attendee 20+ years ago
 - Next with a stand
 - Then on the committee
 - Then ensuring my company provided support
 - Producing Papers
 - Sending people to conferences
 - Going forward I will continue to support
 - Construction delivery organisation involvement optimise
 - Runoff research
 - Retrofit of SUDs

The future

Collaboration with WaPUG

- What has working with WaPUG done for me
 - Allowed me to be involved in some great schemes all round the world
 - Provided the opportunity to work with some really talented people
 - I have been able to put something back into the industry I love
 - Watched people grow in confidence and ability
 - Watched modellers go on to run companies.....but still remember their roots
 - Have huge amount of fun



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Have really great conference

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