The Get It Right Initiative Virtual Members' Meeting

17th September 2020

Working together to eliminate error,
by industry, for industry.

GIRI

Get It Right Initiative

getitright.uk.com @GIRI_UK @GIRI

AGENDA

Welcome and Executive Director’s Report

Reflections and how we have done in 2020

New Members

Communications

Technology Working Group Research

Digital Technology Utilisation-Sottish Futures

BREAK

Error Frequency Ratio

Design Guide

Update on GIRI Training and Consultancy

How can we do better?

Future Events

Wrap Up

Get It Right Initiative members – Sept 2020

11 new members in 2020

New members 2020

Reflections

GIRI Strategic Aim

To improve construction productivity and quality by eliminating error.

10 Storey Manchester Concrete Core to be Demolished

Grenfell Tower inquiry

- Marcio Gomes' evidence

QIC Conference

- Interesting and inspiring
- Very boring
- Blaming everybody else for doing nothing

Looking ahead

- The world will change
- Construction has to change
- We will need to be more efficient
- We have to **get it right**

What is happening now? Negatives

- Quality management staff furloughed
- Incorrect materials being supplied
- Underpricing of future works – ‘the race to the bottom’
- The perfect GIRI storm... we've been so busy keeping things going - have we ‘got things wrong’ in the interim, that we don't yet know about?
- Impact on people

What is happening now? Positives

- Supporting our clients by helping the supply chain remain in place...acting with empathy and being truly collaborative!
- Output per person increased
- Currently 75% productivity
- Greater emphasis on offsite construction
- Great ingenuity

Culture

- Internal communication
- Are senior management open to feedback and suggestions?
- Roll out quality culture in a similar way to safety culture
- Impact of procurement decisions on quality
- How is that impact measured and acted upon?

What's next in the next six months?

- How do we embed GIRI more deeply into member organisations?

- How do we rise to Judith Hackitt's challenge that the industry is still not really addressing the issues?

Comments?

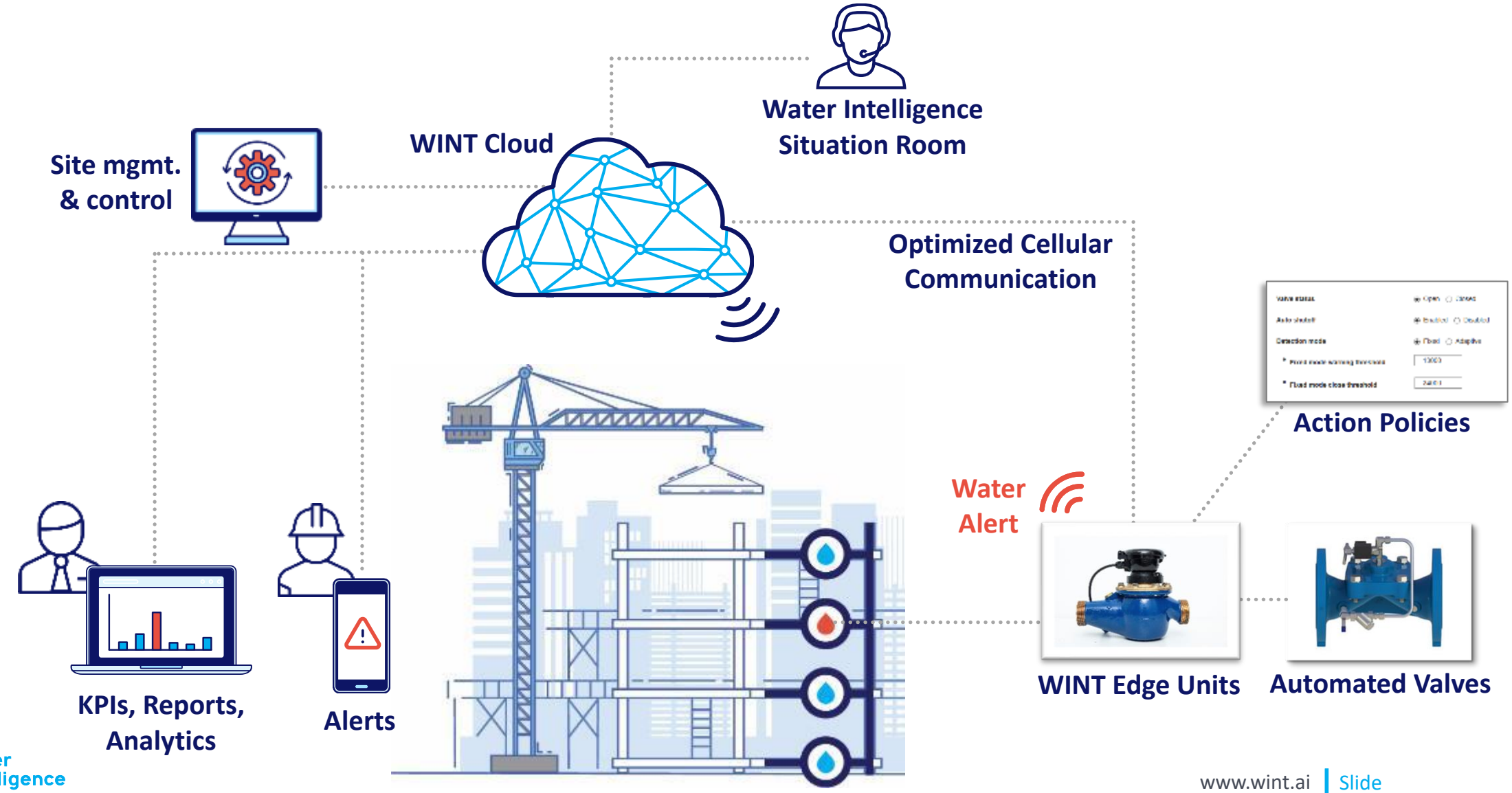
New members

Water Intelligence

Revolutionising Water Leak Prevention

Getting Leak Prevention & Flood Mitigation Right

WINT on Construction Sites



WINT Proprietary and Confidential

What Getting It Right Means To Wint

- **Accurate Detection and Prevention**
  - Machine learning – AI based technology
  - Automatically adapts & learns
  - Automatic shutoff capability
  - **Minimising False Positives**
- **Scalability and Reliability**
  - All pipe sizes & materials
  - Deploy everywhere - Cellular, AC / battery
  - Mission critical - autonomous operation
- **Flexible Action Policies**
  - Work hours / out off hours
  - Alert / user shut off through app
- **Mission Critical**
  - Customer operations center
  - Multiple layers of defense

Some of Our Customers & Partners

WINT Proprietary and Confidential

What does ‘Getting it Right’ mean to Bachy Soletanche?

Dave Belshaw

Quality, Environment and Sustainability Manager

BACHY SOLETANCHE

Who we are?

- Soletanche Bachy (UK) is formed from a group of the UK's leading geotechnical companies, delivering services such as:
  - Foundations.
  - Ground improvement.
  - Underground engineering.
  - Ground Investigation, and
  - Drill and grouting.
- We have a reputation for quality and innovation.
- Our objectives are to supply specialist geotechnical and ground engineering works safely, economically, to a high standard, on time and within our client's budget.
- We are part of Vinci Construction, the world's largest geotechnical group.

UK Group

BACHY SOLETANCHE

- Large diameter rotary piling
- Continuous Flight Auger (CFA)
- Cased Secant Piling (CSP)
- Secant / Contiguous walls
- Diaphragm wall

- Restricted access piling
- Jet / permeation / compensation grouting
- Soil mixing
- Soil nailing / ground anchors

SOIL ENGINEERING

- Site investigation
- Bulk grouting
- Specialist drilling
- Materials testing

VIBRO MENARD

- Vibro stone columns
- Vibro/dynamic compaction
- Controlled modulus columns
- Band drains
- Vacuum consolidation

SIXENSE

- Structural monitoring
- Noise monitoring
- Dust monitoring
- Vibration monitoring
- Data assessment

- Driven precast piling
- Mini-piling
- Underpinning
- House foundations

What does getting it right mean to Bachy Soletanche?

Removing waste, duplication and the associated costs.

Consistent high quality delivery of our services and products.

Delivering the product we have been contracted for, as specified, without NCR's, on budget.

It means using best practice and following company guidelines, policy and procedure for all of our activities. (including safety and environmental practices as well as quality.

Providing the optimum service and product possible.

What do we believe quality means to Bachy Soletanche?

- Quality means **the delivery of products and services to our clients in a professional way** ensuring that we are **consistently at or above their expectations**, particularly in regard to specifications, standards and industry guidance.
- **High quality work provides the business a reputation in the industry** that attracts customers particularly for high end heavy infrastructure work.
- **Completing jobs on time and with no re-work.**
- A perception of paperwork and procedures rather than a belief in delivering a product.
- Quality is a 'benchmark' attributed when measuring a service or product, **Bachy Soletanche 'trade' on quality as a differentiator**.

GIRI

Get It Right Initiative

BACHY SOLETANCHE

What we are aspiring to achieve?

Bachy Soletanche UK	How does GIRI align?
Right first time, a culture where quality is valued highly and honesty / transparency if there is an issue with quality.	Create a culture and working environment to get it right from the start.
Best in class.	Engage all stakeholders in eliminating error from inception, through operation, to completion.
Completing jobs on time and with no re-work.	Change attitudes and harness leadership responsibility to reduce error and improve construction quality and productivity.
Getting it right first time, every time. Having getting it right as part of the culture and not something that other people do.	
We are proactively seeking best practice.	
A measure of excellence when compared to sector comparators.	

Communications update

Helena Russell, GIRI communications manager

Communications update – overview

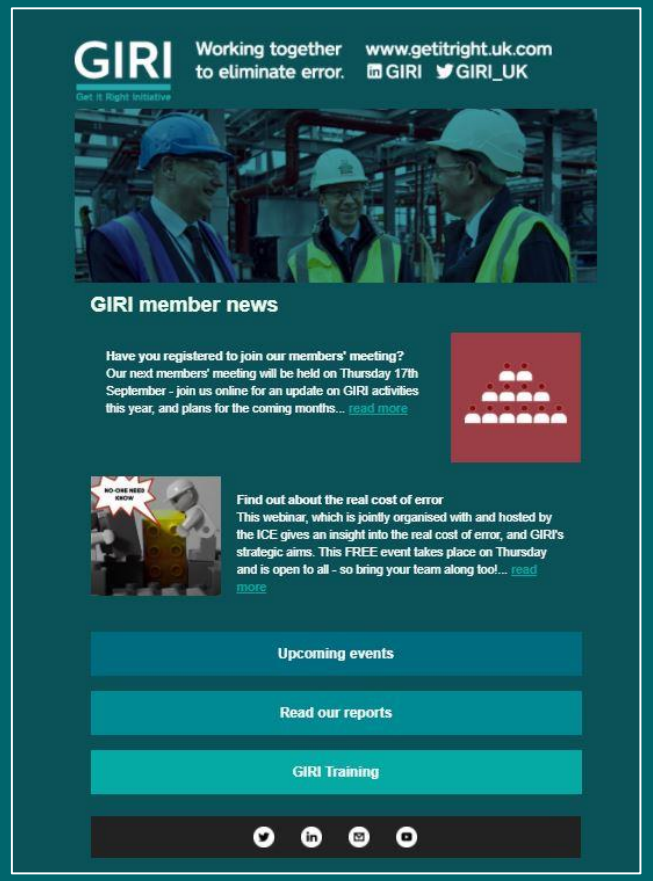
- Member engagement & communication
- New resources available
- Improving our public profile and visibility
- Impact of Covid 19 on communications
- Future activities and support for members

Member communication

- 56 member companies; nine new members this year
- More important than ever to communicate effectively
- GIRI database has been cleaned and rationalised with a system for maintaining it established
- Mailchimp newsletter database updated and separated into two audiences – members and non-members.

Member communication

- Fortnightly newsletters launched
- Approx 250 on the members list, 500 on the general list (no overlap).
- Sign-up forms due to be added to the website and promoted across social media.

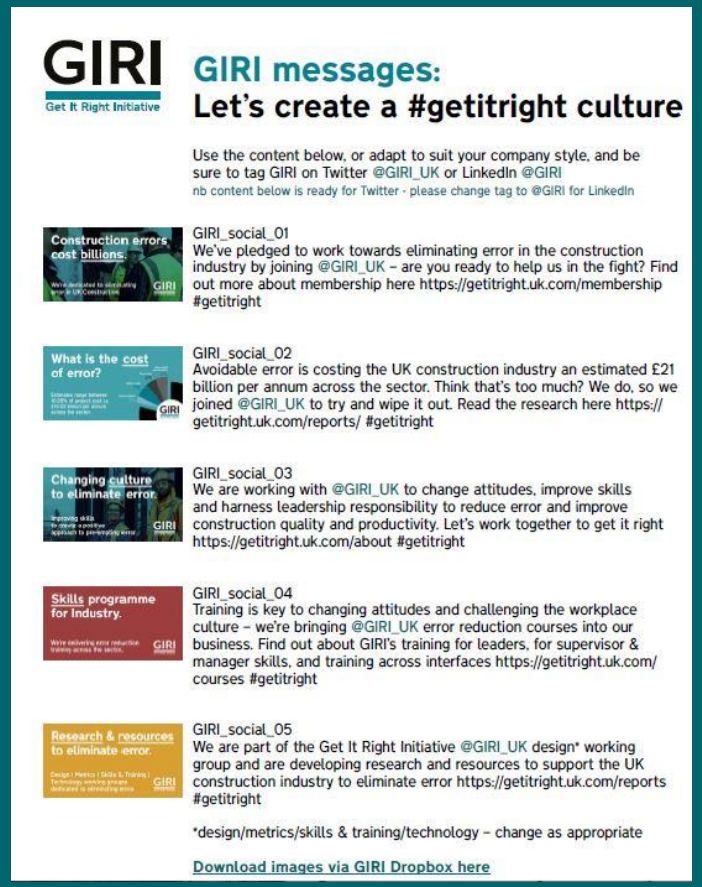


Member feedback

- Regular contact through newsletters keeps communication open and proactive
- Post-event feedback from GIRI forums used to improve them
- Design Guide survey used to seek input on use of this key document
- Post-event survey for members' meeting

New resources

- Media pack for members – including visuals and key messages for use on Twitter or LinkedIn



GIRI
Get It Right Initiative

GIRI messages:
Let's create a #getitright culture

Use the content below, or adapt to suit your company style, and be sure to tag GIRI on Twitter @GIRI_UK or LinkedIn @GIRI
nb content below is ready for Twitter - please change tag to @GIRI for LinkedIn

GIRI_social_01
We've pledged to work towards eliminating error in the construction industry by joining @GIRI_UK – are you ready to help us in the fight? Find out more about membership here https://getitright.uk.com/membership #getitright

GIRI_social_02
Avoidable error is costing the UK construction industry an estimated £21 billion per annum across the sector. Think that's too much? We do, so we joined @GIRI_UK to try and wipe it out. Read the research here https://getitright.uk.com/reports/ #getitright

GIRI_social_03
We are working with @GIRI_UK to change attitudes, improve skills and harness leadership responsibility to reduce error and improve construction quality and productivity. Let's work together to get it right https://getitright.uk.com/about #getitright

GIRI_social_04
Training is key to changing attitudes and challenging the workplace culture – we're bringing @GIRI_UK error reduction courses into our business. Find out about GIRI's training for leaders, for supervisor & manager skills, and training across interfaces https://getitright.uk.com/courses #getitright

GIRI_social_05
We are part of the Get It Right Initiative @GIRI_UK design* working group and are developing research and resources to support the UK construction industry to eliminate error https://getitright.uk.com/reports #getitright

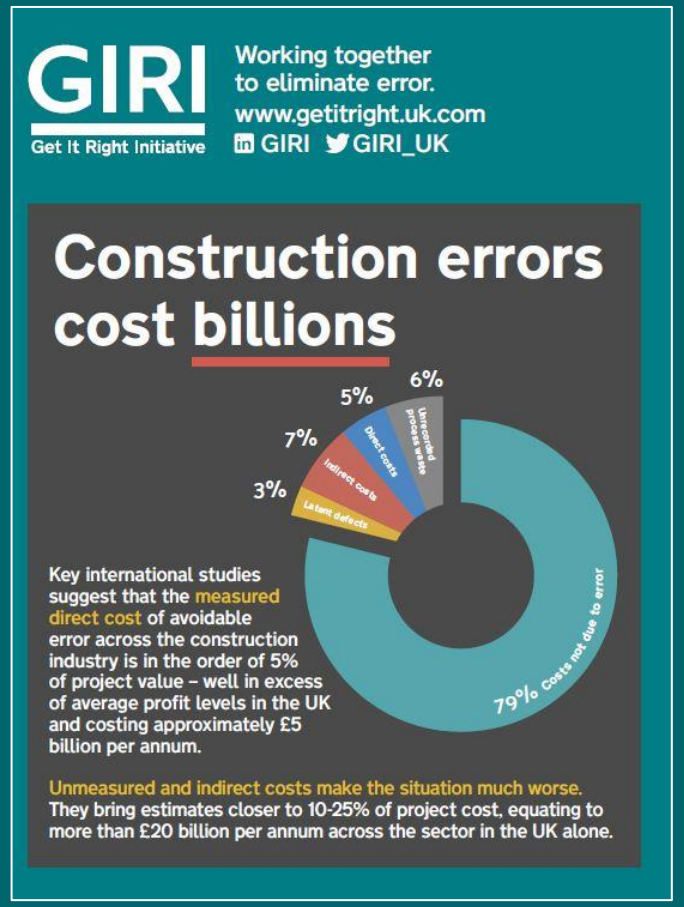
*design/metrics/skills & training/technology – change as appropriate

Download images via GIRI Dropbox here

GIRI
Get It Right Initiative

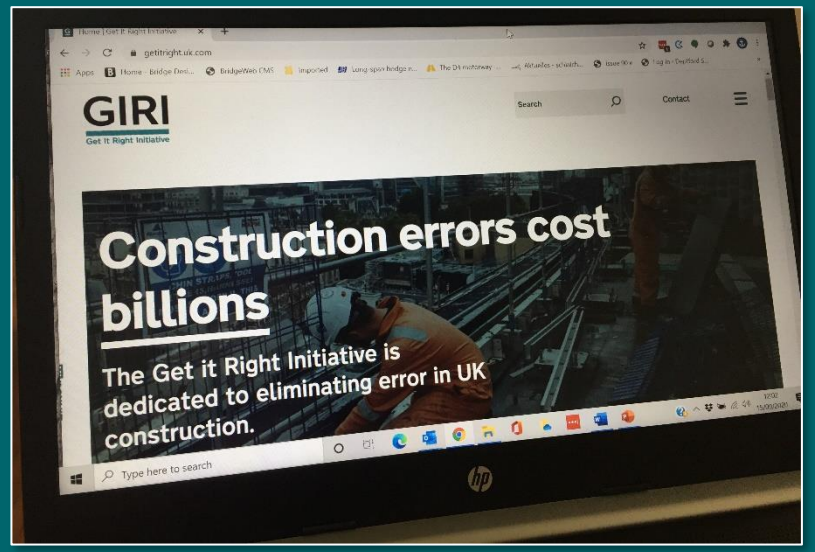
New resources

- GIRI flyer revised and available in digital or print format
- GIRI educational videos on YouTube channel
- Recordings and slides of each forum published



Public profile and visibility – website

- Regular news posts
- All pages have ‘share’ buttons for social media
- Social media links added for member companies
- Last six months – page views up 22%, total users up 42% compared to previous period
- Guidelines for blog posts by member companies

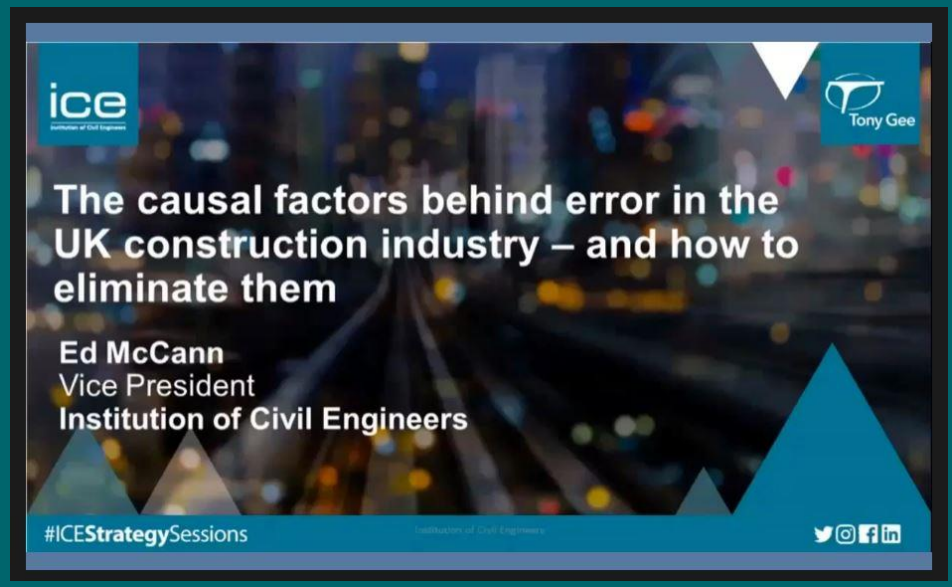


Public profile and visibility – social media

- 69 new Twitter followers (18% increase since Feb)
- LinkedIn GIRI company page has added 272 followers (85% increase since Feb)
- GIRI YouTube channel created as a new resource
- Future of GIRI's LinkedIn group *(versus LinkedIn company page)* to be discussed

Public profile and visibility – events

- GIRI forums
- ‘Insurance insight’ series of webinars with Zurich
- High-profile ICE *Strategy for Change* webinar
- Quality in Construction Summit – panel discussion
- CIOB quality in construction webinar



Impact of Covid-19 on communications

- Online meetings are commonplace – opportunity to engage without distance being an issue
- People are more engaged digitally – but possibly also more weary of screen time
- GIRI team has gained skills in online meeting platforms
- Need to use digital communications efficiently and effectively

Future activities & support

- A new series of GIRI forums launches in October
- Building safety webinar
- *Insurance insight* series of events continues
- In-house webinars for member companies
- Assisting communications teams with internal promotions

Post-meeting survey; your shout….!

Or email: press@getitright.uk.com

Harnessing Technology to Eliminate Error

Cliff Smith
GIRI Board Director

Harnessing Technology to Eliminate Error

Update on Research Progress

Our latest research project undertaken by Grant Mills at UCL was completed and the Report issued in April 2020.

This was based on a survey sent out to all Members in February 2020. Unfortunately the response was limited (11 out of 50 Members responded) so the report findings were somewhat undermined by sample size. Nonetheless the findings provided further background and context for the Technology Group to consider.

Conclusions

Harnessing Technology to Eliminate Error

Conclusions - 1

Extend the application of a specific survey instrument - The sample size is small, so we are not able to generalise the findings beyond the sample of 11 firms. So, we could extend the sample and perhaps provide a stronger focus on a single phase (design, procurement, manufacture or construction, organisation type (e.g. contractor, client or consultant). We might also like to research specific approaches (e.g. “collaborative planning”).

Harnessing Technology to Eliminate Error

Conclusions - 2

Detailed evaluation of a specific technology – We know that some firms value specific technologies more than others to reduce error and increase productivity. We might develop a study that tests the impact of a specific technology or combination of approaches. This would provide us with greater evidence of the causal impact of these technologies and their impact on project outcomes.

Harnessing Technology to Eliminate Error

Conclusions - 3

Error-reduction case studies – We know that there are significant differences in the level of adoption in specific sectors and that there are some firms that are early adopters, while others might lag behind. All will have made investments to adopt technologies and overcome some barriers to their adoption, with variable levels of error-reduction and increased productivity. More detailed case studies could investigate the adoption of these approaches in combination, and identifies the means to support their effective integration

Harnessing Technology to Eliminate Error

Re focussing the Group

The Group met in May 2020 to discuss the Report findings. It was agreed we needed to try and put a more defined focus on our activities because the general nature of our Reports was not necessarily leading to direct assistance for Members (and the Industry at large) in achieving our objective of reducing error and thus increasing productivity.

Harnessing Technology to Eliminate Error

Re-focussing the Group

Our latest Report, demonstrated the breadth and depth of technology availability and the varying levels of technological maturity in the Construction Sector. Comments were received from a number of Group Members regarding the Report and its' Recommendations for potential ways forward.

Tom and I discussed the Report and comments received and considered the Technology Group should learn from the conclusions and re-launch with a focus on the technologies which directly assist in error avoidance and the productivity improvements this imparts.

Harnessing Technology to Eliminate Error

Re-focussing the Group

To this end we adjusted the Membership of the Group to reflect this way forward.

We need to answer a couple of fundamental questions:

- How does technology support existing best practice?
- How does technology support ensuring the right people get the right information at the right time?

We need to look at how existing technologies contribute to these outcomes and perhaps more importantly identify any shortfalls in specific availability.

Harnessing Technology to Eliminate Error

Re-focussing the Group

We have BIM and it is well used by major Clients, Designers and Main Contractors, as well as being backed by Government, to enhance delivery of design information to construction management teams.

There are also many technologies which focus on inspection of work in progress/finished work to highlight errors for resolution.

However the principal means of passing information to the workface remains printed drawings and specifications.

GIRI is committed to identifying means by which error can be eliminated in the first place

Harnessing Technology to Eliminate Error

GIRI Technology Working Group – Case Study Research Proposal

GIRI's initial Research Report identified the root causes of error in projects. The root cause ranked third out of the top ten causes was 'Poorly communicated design information'.

Research Proposal: Carry out case studies into the current use of technology to communicate design information at construction stage to personnel on site.

The purpose of the research is to find out what technologies are being used on projects to ensure that clear, concise and correct information is easily accessible to people carrying out construction work on site, and this information contains everything that is needed to complete the work correctly.

Harnessing Technology to Eliminate Error

GIRI Technology Working Group – Case Study Research Proposal

Proposed Methodology

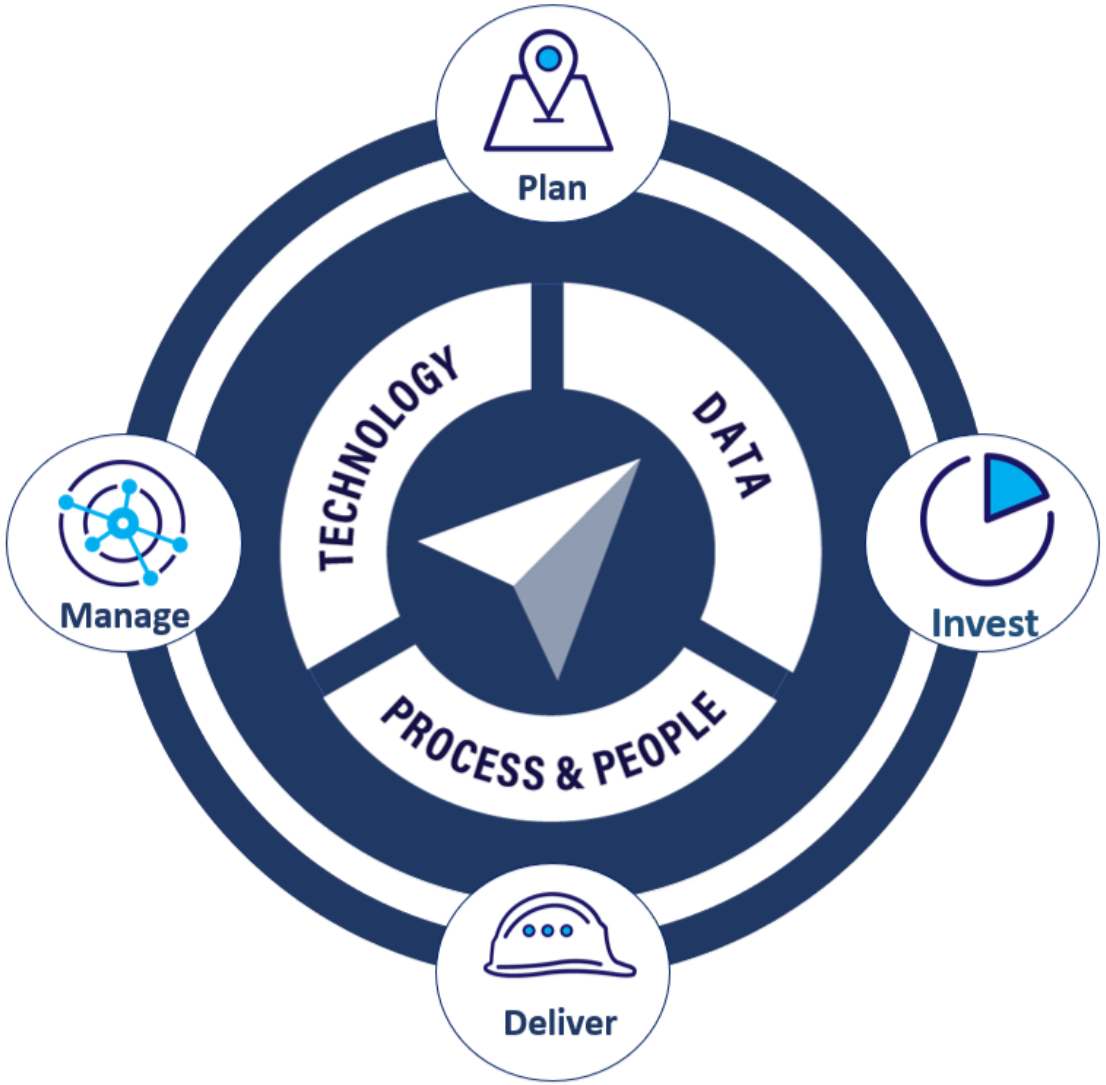
Select three construction projects currently at construction stage, ideally where the design consultants' work is complete, most of the sub-contractors have been procured and work on site is well under way (40-60% complete?). The projects will be put forward by GIRI member companies.

Progress

Contact has been made with three Member Companies to request their support for the Study. Initial response has been positive and confirmation is awaited.

Scottish Futures
Digital Technology Utilisation

Paul Dodd



Infrastructure Technology Navigator

Paul Dodd – Head of Infrastructure Technology

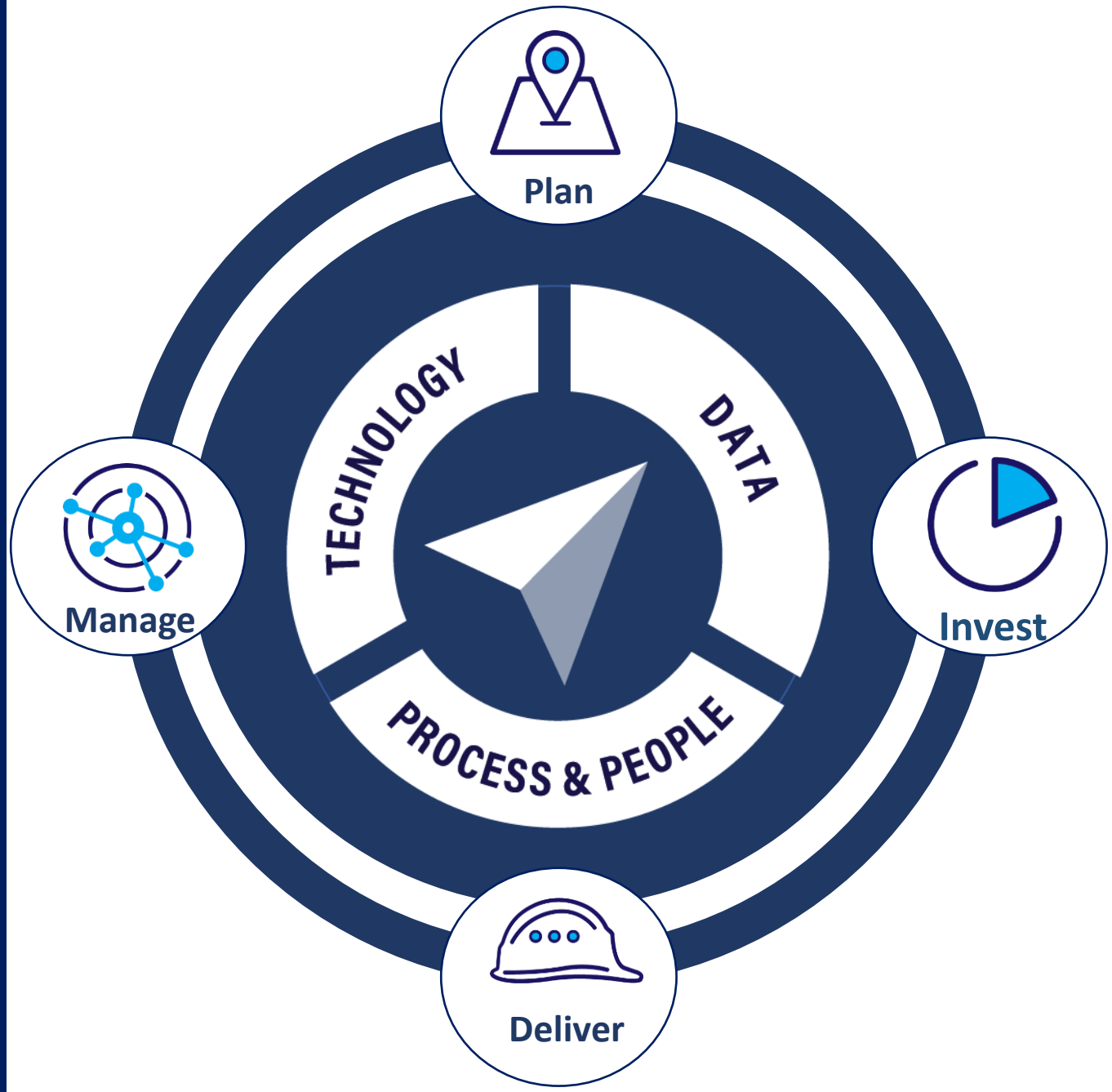
@BimSft

SCOTTISH FUTURES TRUST

"Copyright ©2016 – Scottish Futures Trust"

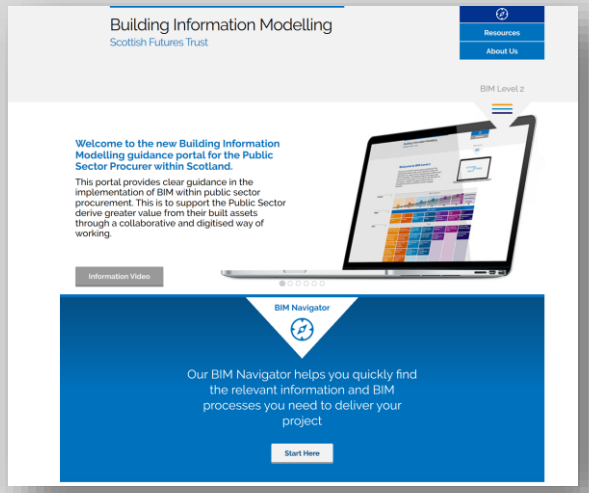
INFRASTRUCTURE TECHNOLOGY

Supporting the public sector realise the benefits of technology and information management to support infrastructure delivery and performance.

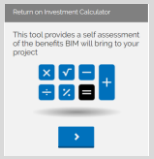


Toolbox

Data



BIM Guidance Portal



Grading Tool

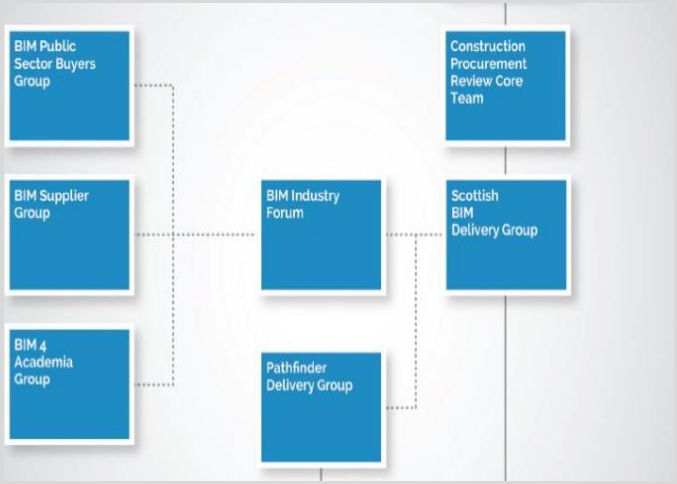
ROI Tool

Templates

BIM Organisational Assessment Tool

Case Studies

Process & People



Working Groups

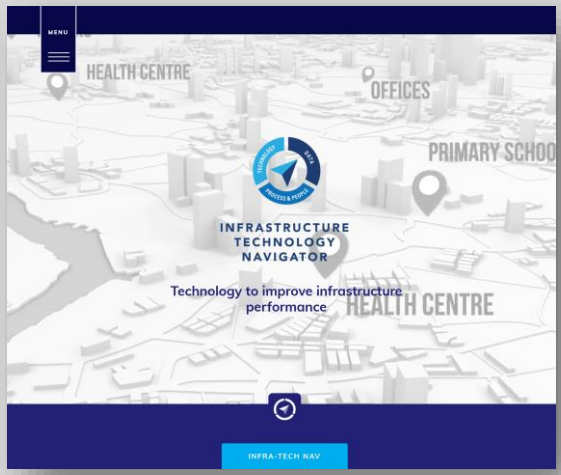
Training Content

Standard Form Information Requirements

Research

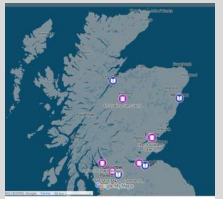
Organizational Information Management

Technology



Infra-Tech Navigator

Whole Life Performance Data



Case Studies

Templates

HealthTech
EnergyTech
WaterTech
EdTech
ConTech
InfrastructureTech
LegalTech
PropTech
RegTech
InsureTech
EnviroTech

Our Response

MENU

INFRASTRUCTURE TECHNOLOGY NAVIGATOR

Supporting the public sector implement technology that improves infrastructure performance

INFRA-TECH NAV

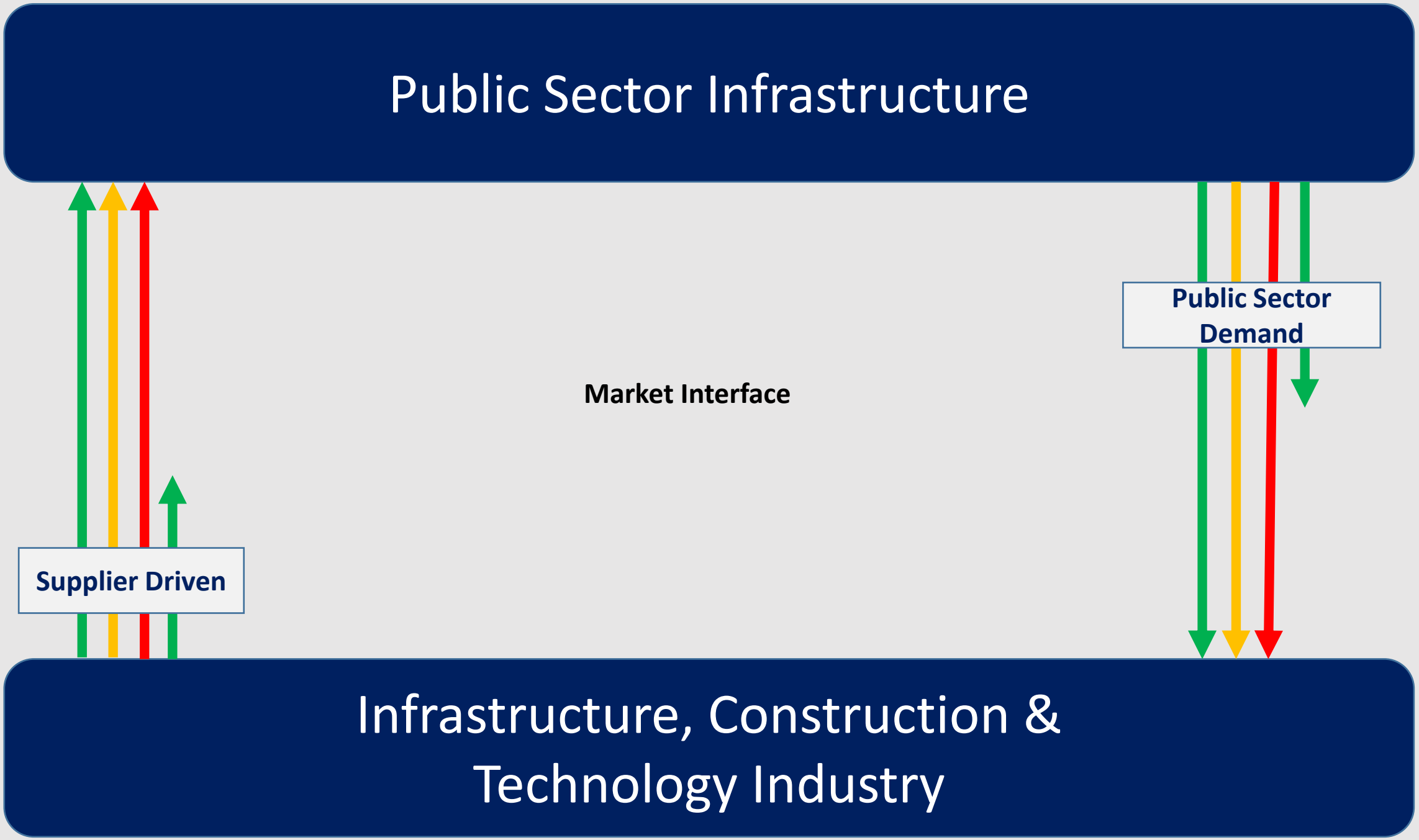
Search for technology to improve the performance of your infrastructure

STEP 1: Select a Stage

STEP 2: Select a Benefit

STEP 3: Select a Type

GO

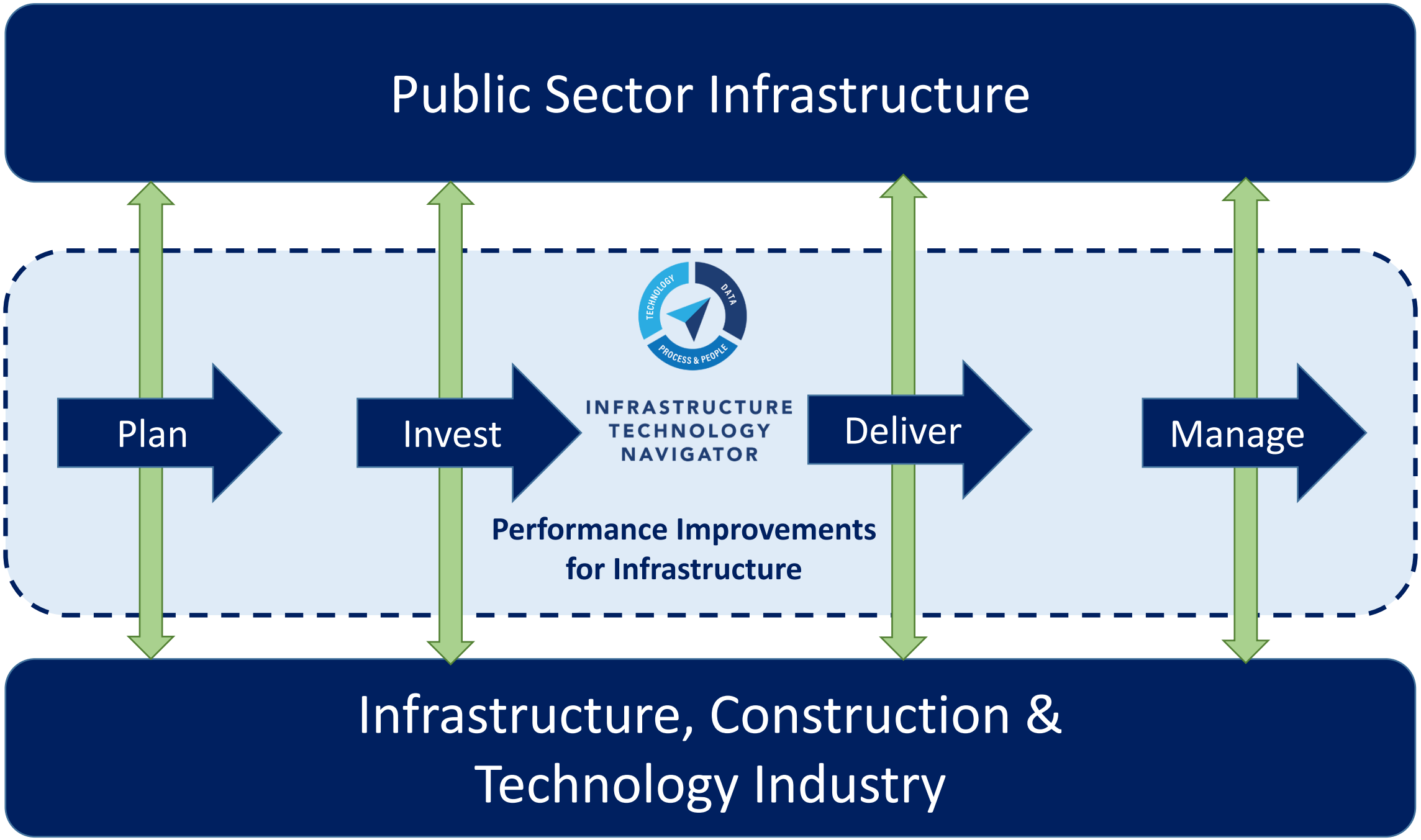

Public Sector Infrastructure
Public Sector Demand
Market Interface
Supplier Driven
Infrastructure, Construction & Technology Industry

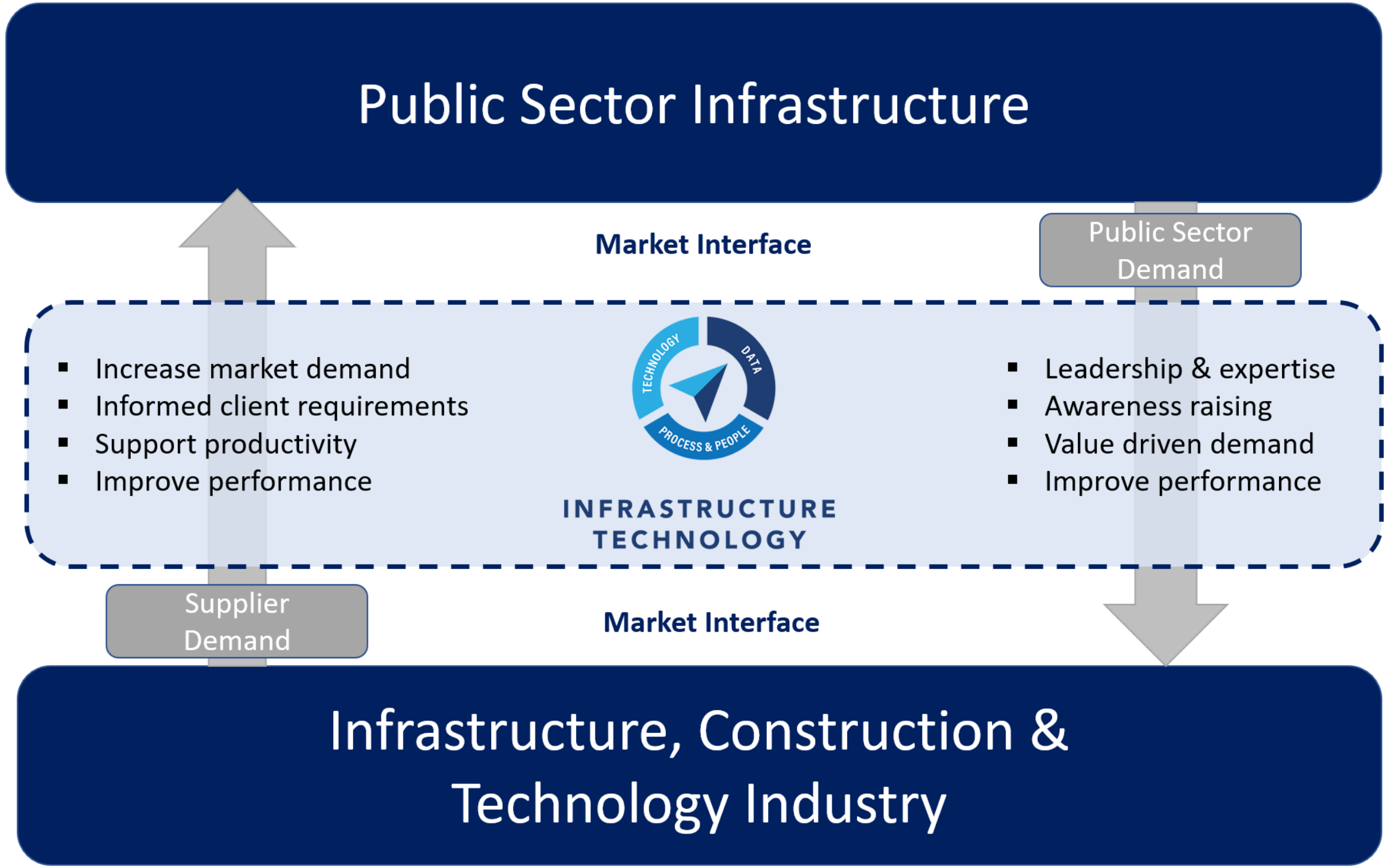
Public Sector Infrastructure

Public Sector Challenges

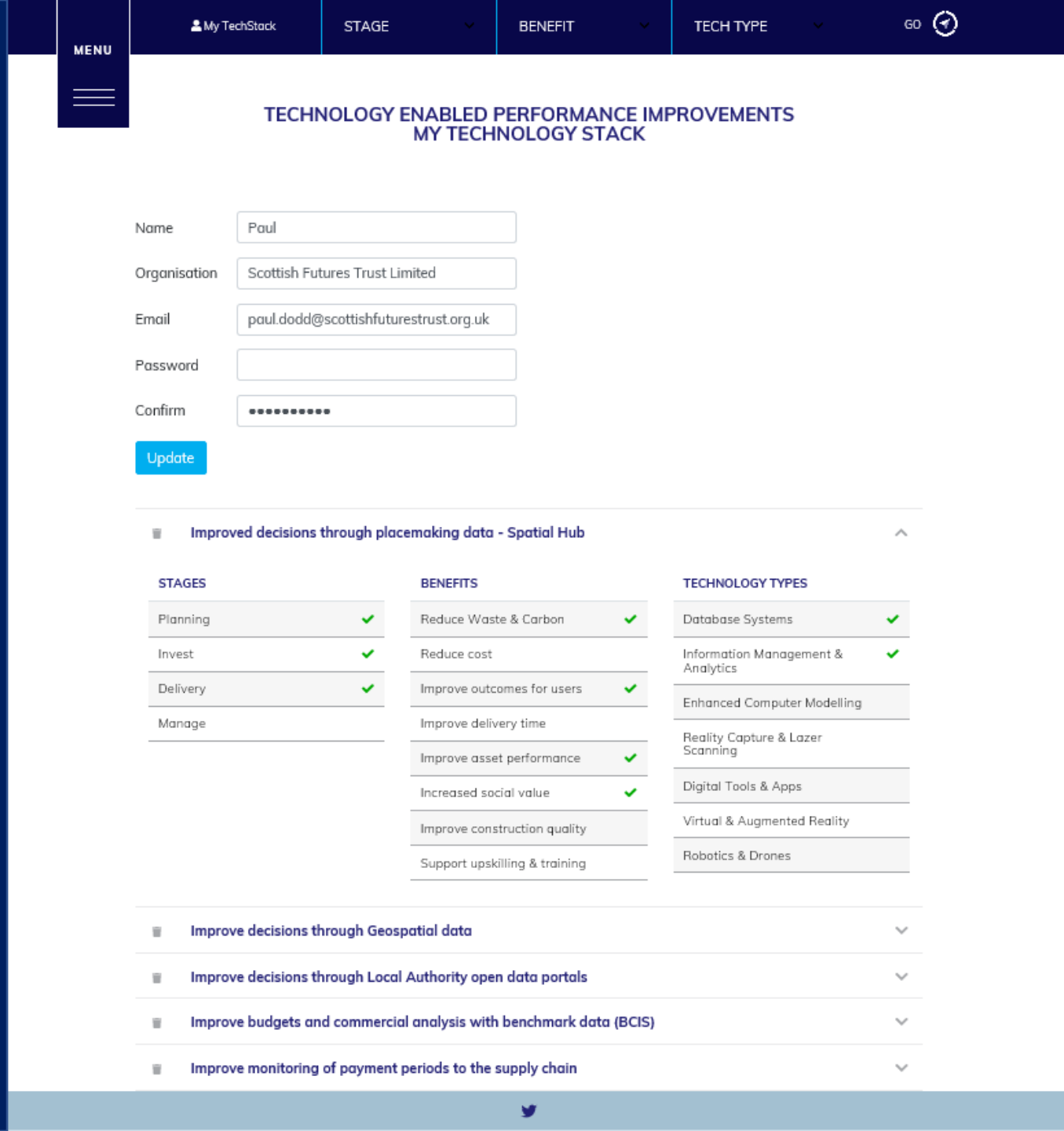
1. Lack of awareness
2. Complex Implementation
3. Lack of Investment
4. Better Utilisation of Data
5. Lack of Skills & Expertise

Infrastructure, Construction & Technology Industry


Public Sector Infrastructure
Plan
Invest
INFRASTRUCTURE TECHNOLOGY NAVIGATOR
Deliver
Manage
Performance Improvements for Infrastructure
Infrastructure, Construction & Technology Industry


Public Sector Infrastructure
Market Interface
Public Sector Demand
Increase market demand
Informed client requirements
Support productivity
Improve performance
TECHNOLOGY
DATA
PROCESS & PEOPLE
INFRASTRUCTURE TECHNOLOGY
Leadership & expertise
Awareness raising
Value driven demand
Improve performance
Supplier Demand
Market Interface
Infrastructure, Construction & Technology Industry

Create your own Infrastructure Technology Stack



PERFORMANCE IMPROVEMENTS

SELECT ONE OF THE **(6)** SOLUTIONS BELOW:

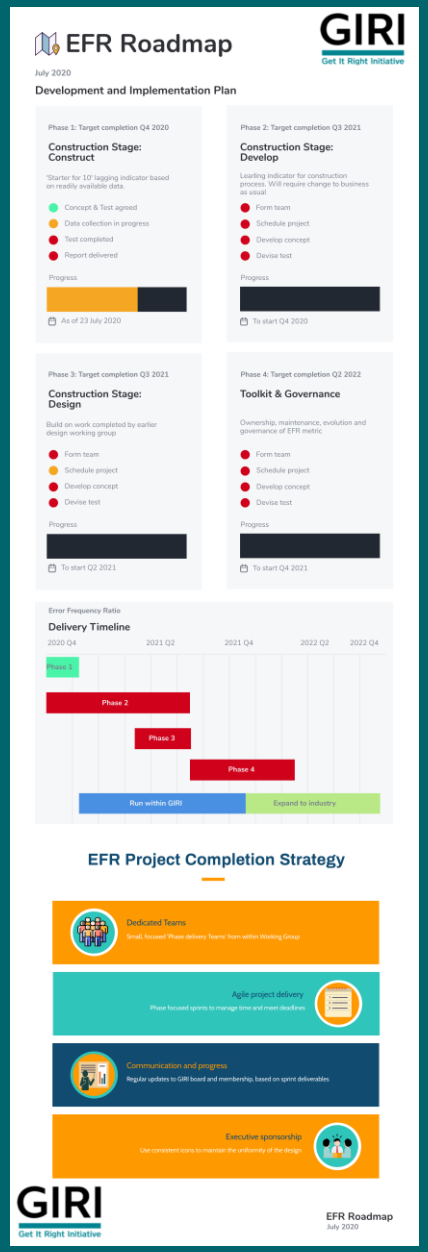
-- filter by tag --

Go

- IMPROVE CONSTRUCTION MONITORING & VALIDATION - DYNAMIC VISUAL MONITORING
- IMPROVE INFORMATION MANAGEMENT & COLLABORATION
- IMPROVE MONITORING OF PAYMENT PERIODS TO THE SUPPLY CHAIN
- COLLABORATIVELY DELIVER SNAG FREE ASSETS AT HANDOVER
- IMPROVED CONSTRUCTION MONITORING & VALIDATION - FIXED VISUAL MONITORING
- IMPROVE CONSTRUCTION MONITORING & VALIDATION - ARIAL VISUAL MONITORING

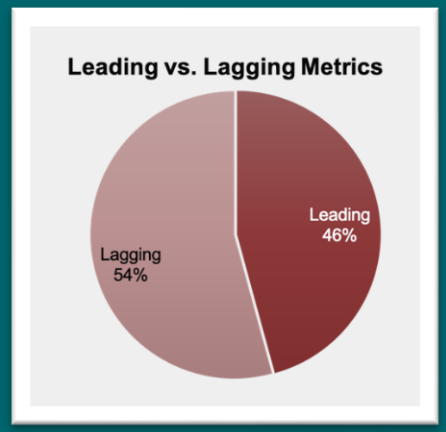
Error Frequency Ratio

Rupert Shingleton/Chris Cheeseman



ERF Project Summary

- 2019 Membership survey favoured starting with a lagging indicator
- 2020 More data required for comprehensive test
- Revised approach for project completion in phases
  - 2021 Error Metric
  - 2022 Error Frequency Ratio



GIRI

Get It Right Initiative

QUALITY PERFORMANCE INDEX (QPI) SUMMARY - 2020/21

RIGHT FIRST TIME METRICS (RFT)	RFT1 Target = 0		Code 2, 3 and Un Coded Documents to be Returned Target <= 4%						DELIVERY OF CERTIFICATION (Not included in QPI score) Cumulative To Date				NCR RFT4 Target >= 95%		NCR Closure Rate Target > 40%			% of Overdue/Open Target <= 5%				CRAF	CRAF	QPI		Rolling 6 Period	
Period 04 (28/06/20 to 25/07/20)	Work Starting without ITP	Rolling 6 period Total	No. of Code 2 Documents	No. of Code 3 Documents	No of Un-coded Documents	Total No. of Code 2, 3 and Un Coded Documents to be Returned	Total No.of Documents in eB	% Code 2, 3 and Un Coded Documents to be Returned	Total Certification Required	Total Certification Completed To date	Total Certification To Go	% Certification Completed To date	% NCRs Raised by Contractor	*Rolling 6 period Av.	% NCRs Closed, out of the total no. of overdue NCR's at the start of the period	Total no. of overdue NCR's at the start of the period	Total No of NCRs Closed In Period	% of NCRs Overdue	Total Open	No. of NCRs Overdue	No. of NCRs Overdue > 60 days	CRAF 1 Score	CRAF 2 Score	QPI - P04	Shift from last standing	Rolling 6 Period Average QPI	Rolling 6 Period Ranking
C660 - Stations	0	1	497	4	118	619	8484	7.3%	271	209	62	77.1%	100.0%	97%	900.0%	1	9	9.4%	32	3	0	2.70	TBA	2.45	↔	2.41	1
C660 - Routeway (Inc. Shafts & Portals)									610	587	23	96.2%											TBA				
C502 - Liverpool Street Station	0	0	321	71	143	535	15668	3.4%	1359	1281	78	94.3%	100.0%	88%	22.4%	85	19	60.6%	109	66	48	2.50	TBA	2.15	▲	1.97	8
C650 - HV Power	0	0	23	3	30	56	1632	3.4%	307	304	3	99.0%	N/A	N/A	100.0%	2	2		0	0	0	2.26	TBA	2.07	▲	2.14	5
C530 - Woolwich Station	0	0	220	115	405	740	12280	6.0%	1267	1218	49	96.1%	100.0%	100%	21.7%	23	5	69.2%	26	18	14	2.46	TBA	2.03	▲	2.05	7
C512 - Whitechapel Station	0	0	435	457	403	1295	22697	5.7%	1405	1206	199	85.8%	90.0%	89%	36.4%	11	4	72.5%	91	66	9	2.52	TBA	1.96	▲	2.08	6
C435 - Farringdon Station	0	0	140	93	184	417	17195	2.4%	549	525	24	95.6%	N/A	100%	20.0%	5	1	85.7%	7	6	0	2.65	2.06	1.90	▼	2.24	2
C360 - Intermediate Shafts	0	0	70	653	525	1248	11904	10.5%	428	404	24	94.4%	100.0%	94%	44.4%	9	4	78.6%	14	11	5	2.56	1.87	1.87	▲	1.90	9
C644 - Traction Power	0	0	54	3	60	117	1191	9.8%	101	94	7	93.1%	N/A	N/A	None O/D	0	0	100.0%	1	1	0	2.41	1.58	1.77	▼	2.19	4
C610 - Systemwide Main Works	0	1	374	66	345	785	9946	7.9%	1314	1210	104	92.1%	100.0%	89%	150.0%	2	3	18.8%	16	3	1	2.02	1.17	1.76	▼	1.89	10
C695 - Plumstead Maintenance Facility	0	0	55	78	225	358	3457	10.4%	266	214	52	80.5%	100.0%	100%	None O/D	0	2	18.2%	11	2	0	2.28	1.15	1.70	▼	2.23	3
C620 - Signalling System	0	0	163	9	101	273	2159	12.6%	214	206	8	96.3%	100.0%	100%	22.2%	9	2	38.9%	18	7	6	2.31	1.63	1.65	▲	1.72	11
C412 - Bond Street Station	0	0	341	114	193	648	13353	4.9%	1618	715	903	44.2%	N/A	80%	3.1%	162	5	97.5%	160	156	150	1.78	TBA	1.52	▲	1.58	14
C405 - Paddington Station	0	1	348	95	273	716	19096	3.7%	1396	1128	268	80.8%	55.6%	65%	15.6%	77	12	83.1%	89	74	62	1.80	TBA	1.50	▲	1.48	16
C520 - Custom House Station	0	0	47	3	190	240	9143	2.6%	380	378	2	99.5%	N/A	N/A	0.0%	1	0	100.0%	1	1	1	1.94	1.37	1.42	▲	1.52	15
C422 - Tottenham Court Road Station	1	1	314	25	529	868	11609	7.5%	1437	1358	79	94.5%	92.3%	92%	33.3%	27	9	53.2%	47	25	13	2.02	TBA	1.36	▼	1.60	13
C239 - Canary Wharf Station	0	0	132	180	140	452	5500	8.2%	687	630	57	91.7%	0.0%	11%	0.0%	2	0	20.0%	15	3	0	2.01	TBA	1.36	▼	1.70	12
																						PROGRAMME (QPI TARGET: 2.00)		1.78	▼	YTD: 1.92	

Contract CRAF2 League Table - P04

Key
- ⇑ Actions Progressed
- ⇧ Actions Progressed during Period
- ⇓ Actions not verified as complete
- * Significant Progress (RAG ⇑)
- ✓ Significant Progress during period (RAG ⇑)
- ✓ ECP Signed off
- N/A Section N/A

Contract CRAF2 League Table - P04	Closure of CRAF Actions	Completion Resourcing and programming	Health and Safety File/s	Crossrail Programme Functional Requirements (CPFR)	Engineering Safety Management (ESM) deliverables	Interoperability Regulations-TSI compliance	Gate Impact Reports (GIR)	Data Recording & Corrective Action System (DRACAS)	Crossrail Observations	Planning, Heritage & Highways	Environment	Undertakings and Assurances	Document Control	Assets	3D Models / As Builts	O&M Manuals	Technical Training for Infrastructure Managers	Certification of Works including Red-lines	Non-conformance Reports (NCRs) close-out	Site Tour	CRAF2 Original Score	CRAF2 Current Score	SHIFT	% CRAF Actions Verified as Completed
C340 - Victoria Dock Portal	N/A		⇧	✓	⇧	✓	✓	✓⇧	⇧	✓	✓	⇧	⇧	⇧	⇧	✓	⇧	⇧	⇧	N/A	1.84	2.69	▲	88%
C435 - Farringdon Station		⇧		⇧			⇧						⇧	⇧	⇧		⇧			⇧	1.81	2.06	▲	30%
C360 - Intermediate Shafts		⇧				⇧			⇧	⇧	⇧					⇧	⇧			⇧	1.62	1.87	▲	42%
C336 - Paddington New Yard	N/A		✓	✓		✓		✓		✓	✓				✓						1.82	1.82	↔	
C620 - Signalling System		⇧	⇧	⇧	⇧		⇧	⇧		N/A	⇧				⇧			⇧	⇧		1.38	1.63	▲	29%
C631 - Platform Screen Doors										N/A	N/A	N/A					✓				1.61	1.61	↔	
C644 - Traction Power																					1.58	1.58	↔	
C520 - Custom House Station											✓						✓				1.37	1.37	↔	
C610 - Systemwide Main Works		⇧																	⇧		1.17	1.17	↔	2%
C695 - Plumstead Maintenance Facility		⇧				N/A		⇧	⇧				⇧							⇧	1.15	1.15	↔	13%
																				Programme Average:	1.54	1.70	▲	34%

GIRI

getitright.uk.com @GIRI_UK @GIRI

Get It Right Initiative

Development

1. Develop lagging indicator (Construct)
2. Develop leading indicators (Design)
3. Error data becomes public information
4. Behavioural KPIs emerge
5. Leading indicators and behavioural KPIs emerge across all processes (Full EFR Realised)

2020

2022

Implementation

A. Establish enough data to draw conclusions and set targets (GIRI membership)

B. Large clients start comparisons within supply chain. Drive broader uptake and improvement

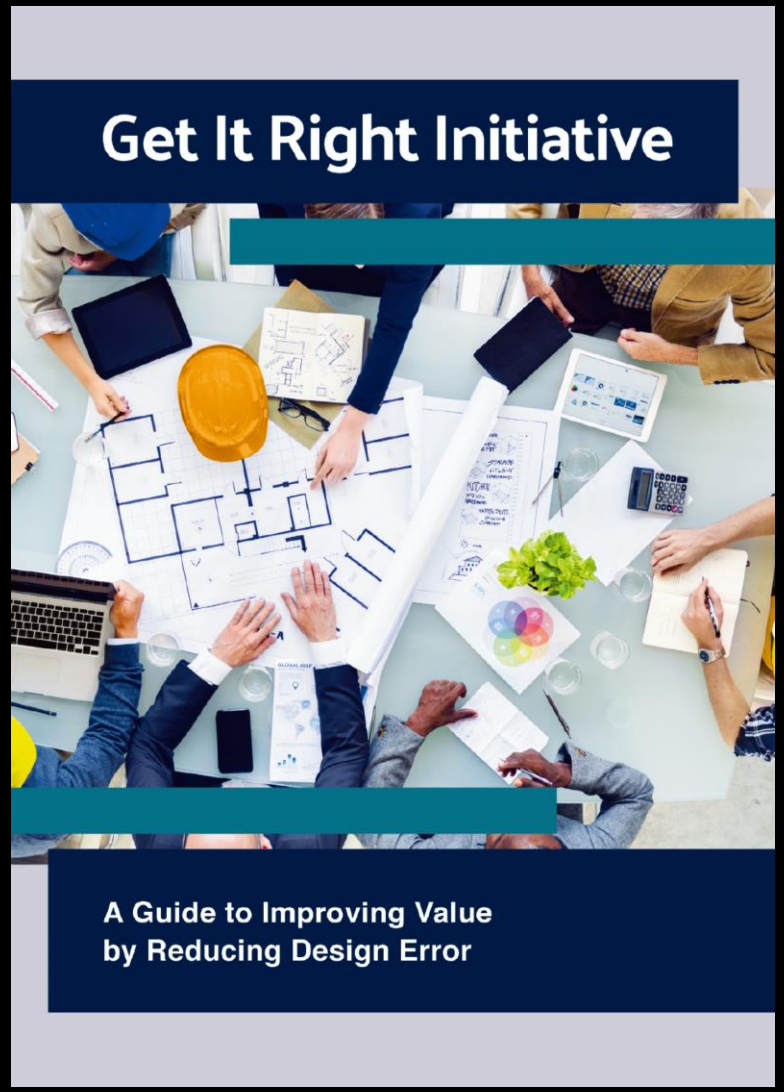
C. Sectors start comparisons. Drive broader uptake and improvement

D. Private sector procurement decisions influenced by error stats

E. Government procurement decisions influenced by Error stats

ERF Project Strategy / Timeline

Design Guide progress


Get It Right Initiative
A Guide to Improving Value
by Reducing Design Error

GIRI

Some perceptions and questions

Too academic
No specific answers
Really positive approach
Too much information
Does not help my day job

Is the content right?
Is the structure right?
How can we help people to use it?
Should we rewrite it?

Survey

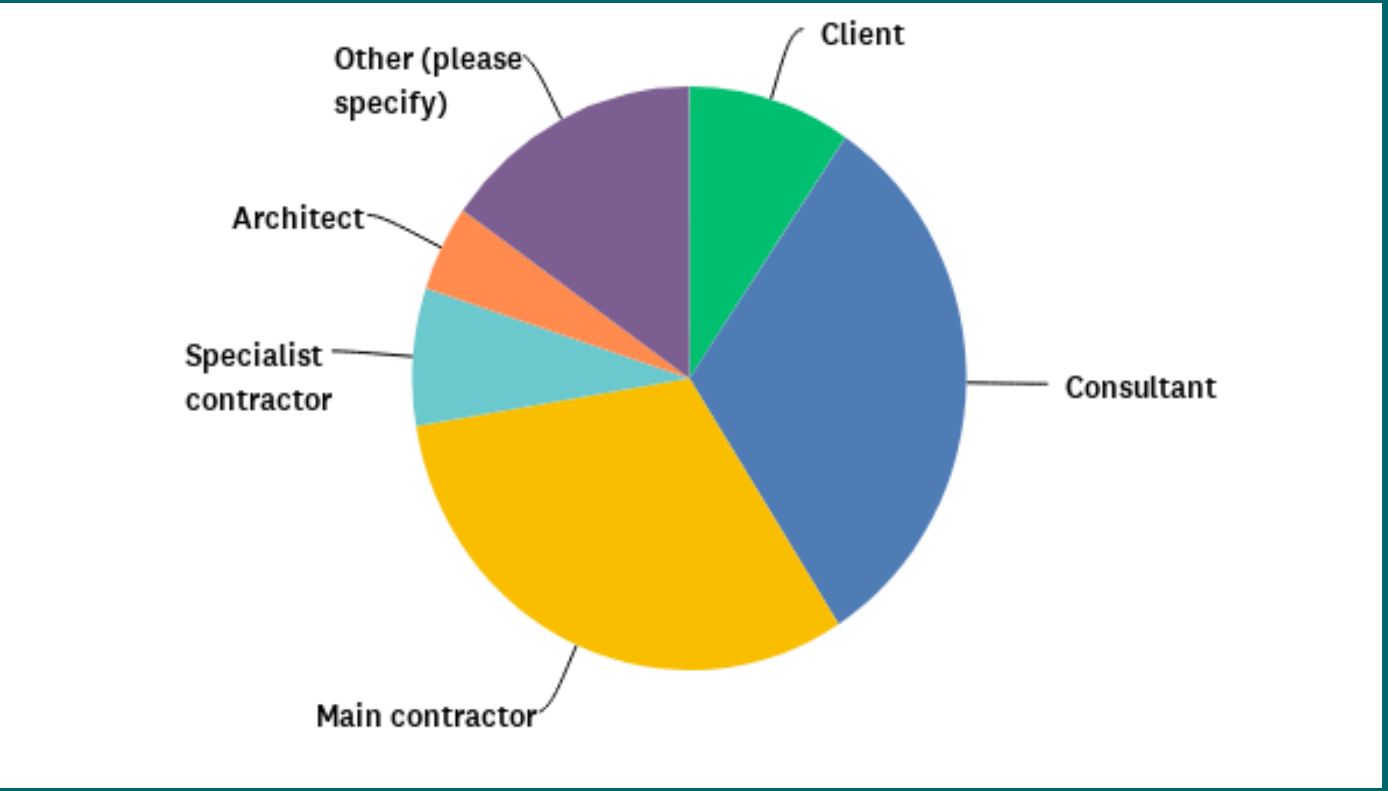
The main purpose of the survey was to try and establish the following:

- How many people in the industry already know about/own a copy of the Design Guide?
- Of those who have a copy, how many use it ?
- Comments were invited on why people do/do not use it, to gain an understanding of how it is used and perceived ?

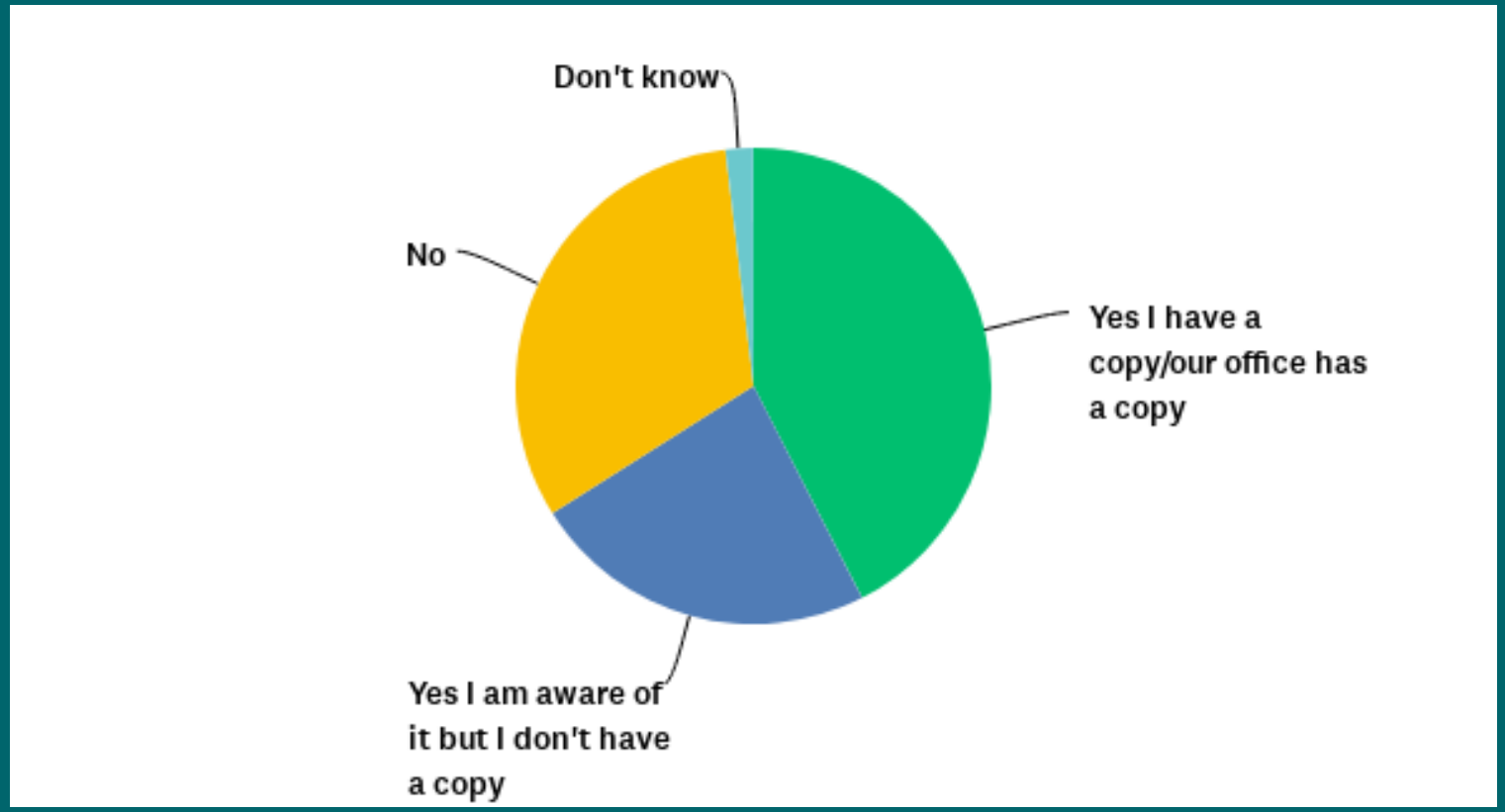
Five questions

- What type of organisation do you work for? (dropdown list – client, contractor, consultant etc)
- Are you aware of the GIRI *Guide to Improving Value by Reducing Design Error?* (dropdown yes/no/don't know)
- Do you refer to/use the recommendations of the *Design Guide* in your work? (dropdown yes/no)
- Please give us some insight into your answer to Q2 - why you do or don't use it, how easy you find it to use, what puts you off using it and so on. (free text)
- Do you have any other comments as to how it could be improved? (free text)

106 responses



Are you aware of the GIRI *Guide to Improving Value by Reducing Design Error*?



Why do you use it?

- It’s a good overview tool
- It represents good practice
- The recommendations are particularly useful
- Very easy to use
- Structured process for getting it right
- Useful as a back up
- Using it to compile a design management course
- Terms of reference are good

Why don’t you use it?

- Wasn’t aware of it till now
- The core principles are already covered in other documents/company procedures
- Guide lacks detail in some places
- Uncertain where it sits in relation to other design frameworks
- Does not offer practical assistance in how to achieve the goals
- Needs wider understanding of design input on D&B projects
- Can’t get management/client buy-in
- Recommendations too high-level and generic
- Difficult to explain how the principles align with needs of different clients
- Objectives are too well hidden in text
- The 12 recommendations need more of a framework

Questions

GIRI Training & Consultancy

Rachel Hogarth, Nick Francis

GIRI Training Update: Scale Up

- GIRI now a CITB '**Recognised Training Organisation**'
- GIRI/CITB have agreed a framework for GIRI to monitor the quality of training provision
- CITB will signpost to GIRI website for all GIRI training information
- GIRI to approve and monitor all Training Providers and Trainers who deliver GIRI Accredited Training
- GIRI will certify all GIRI Training
- Training providers/ employers must be a CITB Approved Training Organisation (ATO) for grant purposes (GTC Applied Aug-20) and add GIRI courses to their approval

GIRI Training Update: Scale Up

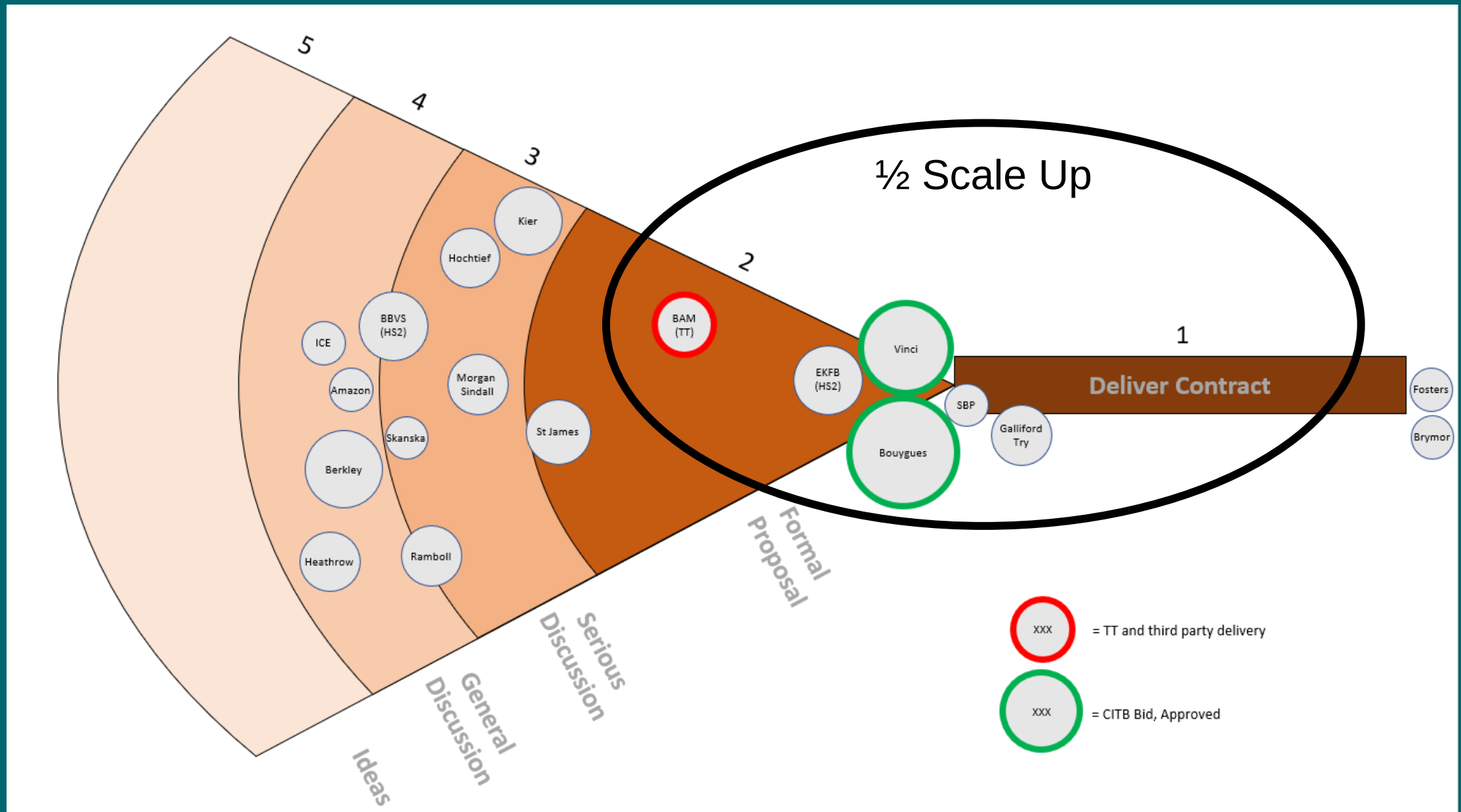
Element	% Complete
Financial / Legal	57%
Funding / Pricing / Grants	87%
Delivery / Booking Systems	50%
Marketing / Communication	12%
Accreditation Systems	14%
Face-Face Course Content	100%
Remote Course Content	80%
Train the Trainer Systems	55%
Operative Training	
LMS	15%
Third Party Training Capacity	

GIRI Training Update: CITB Grants

- All GIRI modules now showing on CITB website with links to the course **‘Standards’** on the GIRI website
- All course ‘Standards’ will be published / maintained by GIRI
- **GET Codes** have been created/ published – grants now claimable
- All courses assigned **Tier 1** grant rate **£30** per person per course
- Grant will be payable automatically if Training Provider/ employer is a CITB ATO and GIRI Approved

GIRI Training Update:
Training Delivery & Development

- **Face to Face Training**
  - One-day packages
- **Remote Training**
  - Aligned with face-to-face
  - Mural & Blackboard Collaborate
- **Open Courses & In-House Training**
- **Trainer Capacity**
  - GTC / Third Party Providers


½ Scale Up
5
4
3
2
1
Ideas
General Discussion
Serious Discussion
Formal Proposal
Deliver Contract
Kier
Hochtief
BBVS (HS2)
ICE
Amazon
Morgan Sindall
Skanska
Berkley
Heathrow
Ramboll
St James
BAM (TT)
EKFB (HS2)
Vinci
Bouygues
SBP
Galliford Try
Fosters
Brymor
XXX
= TT and third party delivery
XXX
= CITB Bid, Approved

GIRI Training Update: Training Delivery
Courses delivered Nov 19 to Sep 20

COURSE TYPE	NO. COURSES	NO. DELEGATES	TRAINING HRS
OPEN	2	12	42
IN-HOUSE	4	45	183
TOTAL	6	57	225

3 no. courses booked/postponed due to COVID-10
GTC supported GIRI with delivery of COVID webinars (Apr-Jul)

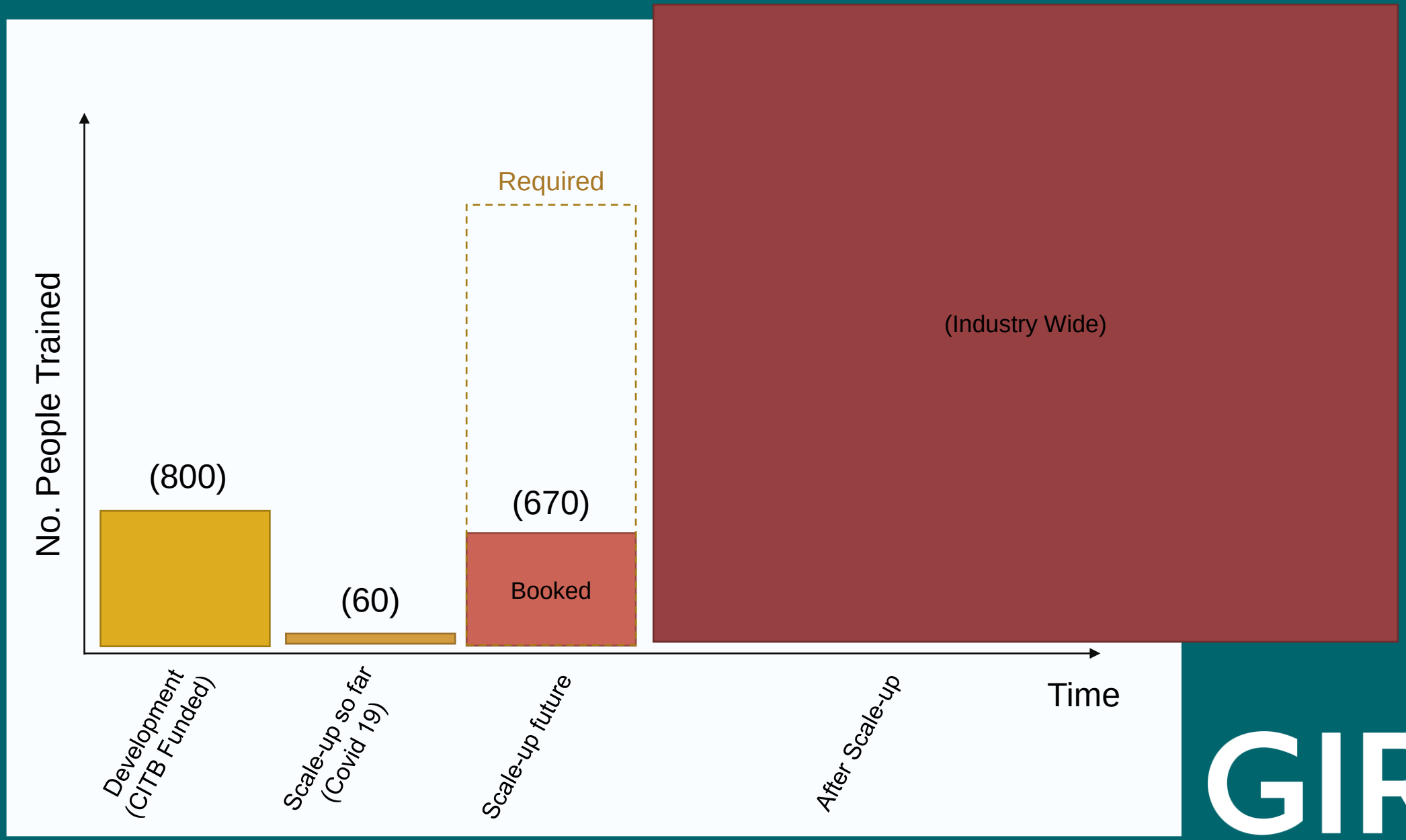
GIRI Training Update: Training Delivery Courses Booked

COURSE TYPE	NO. COURSES	NO. DELEGATES	TRAINING HRS
OPEN	6	48*	192*
IN-HOUSE (Non-funded)	24	144*	936*
IN-HOUSE (CITB-Funded)	86	475*	3210*

Also delivering bespoke workshops, behavioural training and providing support with GIRI webinars

** estimated*

GIRI


No. People Trained
Required
(800)
(60)
(670)
Booked
(Industry Wide)
Development (CITB Funded)
Scale-up so far (Covid 19)
Scale-up future
After Scale-up
Time

GIRI Training Update: GTC Open Courses

Course	Part	Date	Time	Per Person Price (GIRI Discount)
Supervisor & Manager Training (Both Parts)	Part 1 – Supervision	Tue 20th Oct	0900-1215	£250
	Part 2 – Planning	Tue 17th Nov	0900-1215	
Interfaces Training (Both Parts)*	Part 1 - Collaboration	Thu 22nd Oct	0900-1245	£260
	Part 2 - Design	Thu 5th Nov	0900-1245	
Leadership Training	Full course	Tue 3rd Nov	0900-1600	£305
Leadership Training	Full course	Tue 24th Nov	0900-1600	£305

* Participants can book to only attend Part 1, at £195

Book through: www.getitright.uk.com/courses

GIRI

GIRI Training Update:

For any enquiries about GIRI Training or becoming a GIRI Approved Training Provider:

rachel.hogarth@getitright.uk.com

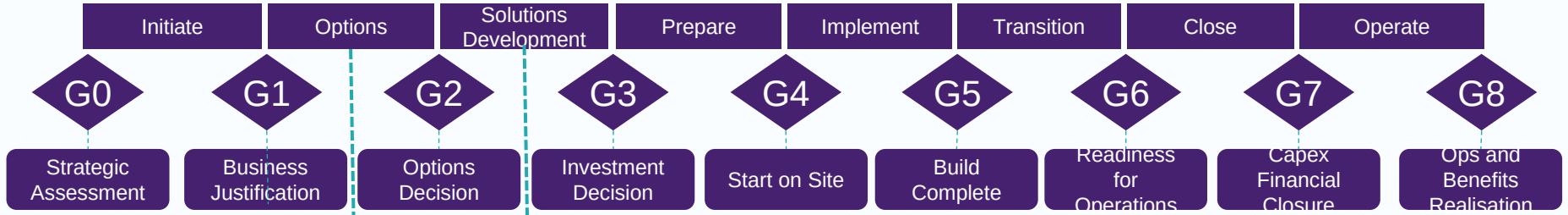
nick.francis@getitright.uk.com

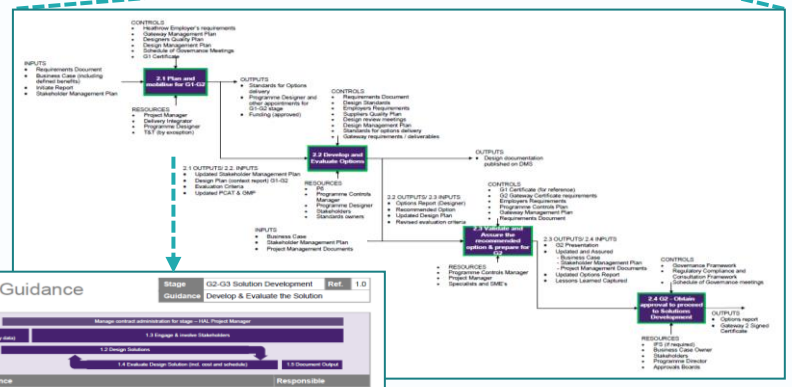
How can we do better?

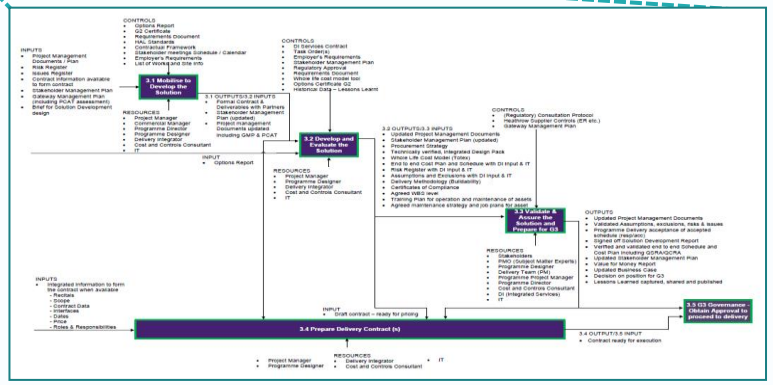
Helen Soulou, Head of Quality Solutions,
Heathrow Airport

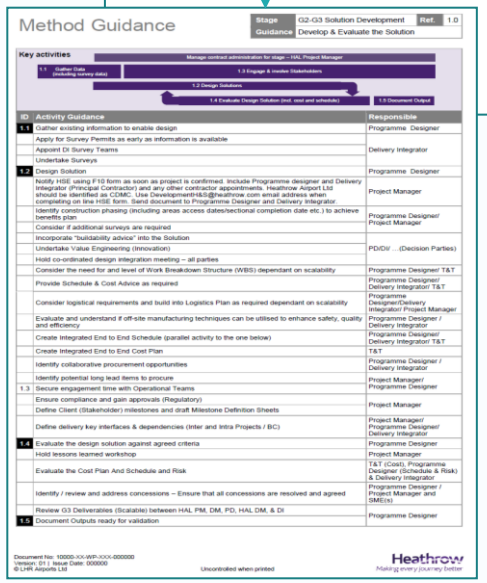
How can we do better?

- Are the issues we face unique?
- What can we learn from other industries?
- How can we continually improve?









Method Guidance

Stage: G2-G3 Solution Development | Ref. 1.0

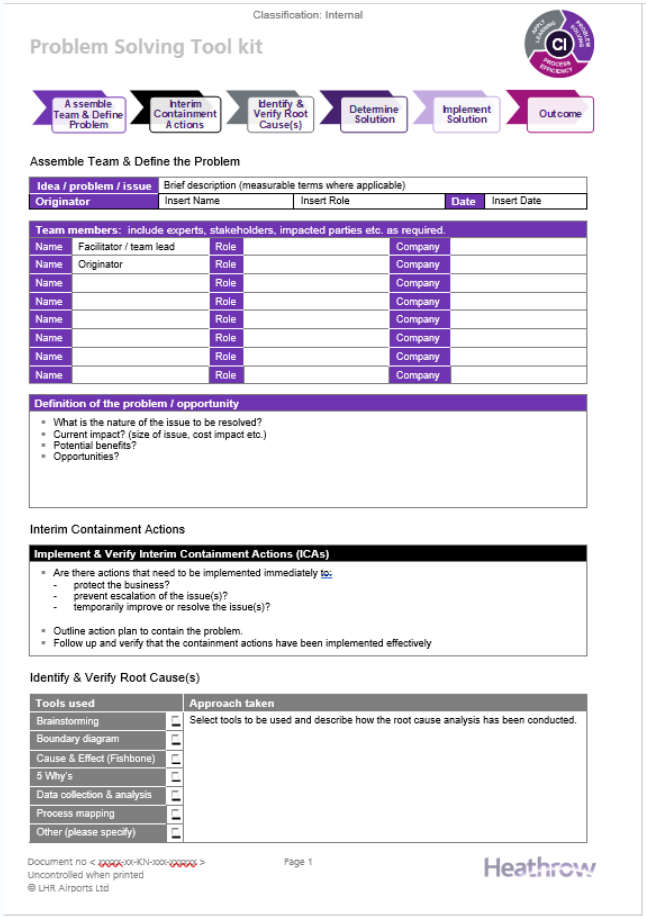
Guidance: Develop & Evaluate the Solution

Key activities

ID	Activity Guidance	Responsible
1.1	Gather existing information to enable design	Programme Designer
	Apply for Survey Permits as early as information is available	
	Appoint DI Survey Teams	Delivery Integrator
	Undertake Surveys	
1.2	Design Solution	Programme Designer
	Notify HSE using F10 form as soon as project is confirmed. Include Programme designer and Delivery Integrator (Principal Contractor) and any other contractor appointments. Heathrow Airport Ltd should be identified as CDMC. Use DevelopmentH&S@heathrow.com email address when completing on line HSE form. Send document to Programme Designer and Delivery Integrator.	Project Manager
	Identify construction phasing (including areas access dates/sectional completion date etc.) to achieve benefits plan	Programme Designer/ Project Manager
	Consider if additional surveys are required	
	Incorporate "buildability advice" into the Solution	
	Undertake Value Engineering (Innovation)	PD/DI/ …(Decision Parties)
	Hold co-ordinated design integration meeting – all parties	
	Consider the need for and level of Work Breakdown Structure (WBS) dependant on scalability	Programme Designer/ T&T
	Provide Schedule & Cost Advice as required	Programme Designer/ Delivery Integrator/ T&T
	Consider logistical requirements and build into Logistics Plan as required dependant on scalability	Programme Designer/Delivery Integrator/ Project Manager
	Evaluate and understand if off-site manufacturing techniques can be utilised to enhance safety, quality and efficiency	Programme Designer / Delivery Integrator
	Create Integrated End to End Schedule (parallel activity to the one below)	Programme Designer/ Delivery Integrator/ T&T
	Create Integrated End to End Cost Plan	T&T
	Identify collaborative procurement opportunities	Programme Designer / Delivery Integrator
	Identify potential long lead items to procure	Project Manager/ Programme Designer
1.3	Secure engagement time with Operational Teams	
	Ensure compliance and gain approvals (Regulatory)	Project Manager
	Define Client (Stakeholder) milestones and draft Milestone Definition Sheets	
	Define delivery key interfaces & dependencies (Inter and Intra Projects / BC)	Project Manager/ Programme Designer/ Delivery Integrator
1.4	Evaluate the design solution against agreed criteria	Programme Designer
	Hold lessons learned workshop	Project Manager
	Evaluate the Cost Plan And Schedule and Risk	T&T (Cost), Programme Designer (Schedule & Risk) & Delivery Integrator
	Identify / review and address concessions – Ensure that all concessions are resolved and agreed	Programme Designer / Project Manager and SME(s)
	Review G3 Deliverables (Scalable) between HAL PM, DM, PD, HAL DM, & DI	Programme Designer
1.5	Document Outputs ready for validation	

Document No: 10000-XX-WP-XXX-000000
Version: 01 | Issue Date: 000000
© LHR Airports Ltd
Uncontrolled when printed
Heathrow
Making every journey better

GIRI



Classification: Internal

Problem Solving Tool kit

Assemble Team & Define Problem | Interim Containment Actions | Identify & Verify Root Cause(s) | Determine Solution | Implement Solution | Outcome

Assemble Team & Define the Problem

Idea / problem / issue	Brief description (measurable terms where applicable)				
Originator	Insert Name	Insert Role	Date	Insert Date	

Team members: include experts, stakeholders, impacted parties etc. as required.

Name	Facilitator / team lead	Role		Company	
Name	Originator	Role		Company	
Name		Role		Company	
Name		Role		Company	
Name		Role		Company	
Name		Role		Company	
Name		Role		Company	
Name		Role		Company	

Definition of the problem / opportunity

- What is the nature of the issue to be resolved?
- Current impact? (size of issue, cost impact etc.)
- Potential benefits?
- Opportunities?

Interim Containment Actions

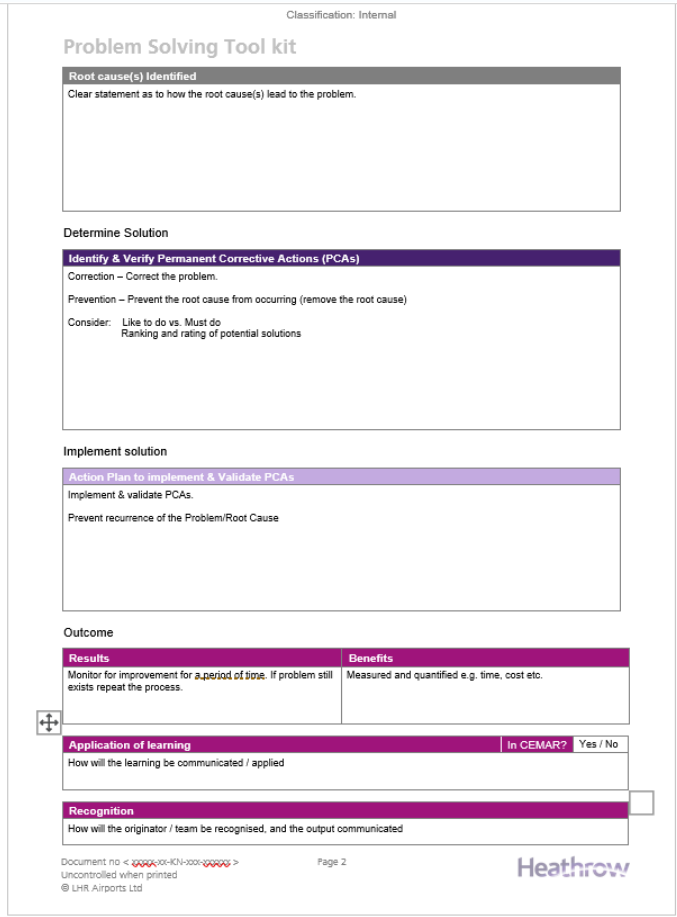
Implement & Verify Interim Containment Actions (ICAs)

- Are there actions that need to be implemented immediately to:
  - protect the business?
  - prevent escalation of the issue(s)?
  - temporarily improve or resolve the issue(s)?
- Outline action plan to contain the problem.
- Follow up and verify that the containment actions have been implemented effectively

Identify & Verify Root Cause(s)

Tools used	Approach taken
Brainstorming	Select tools to be used and describe how the root cause analysis has been conducted.
Boundary diagram	
Cause & Effect (Fishbone)	
5 Why's	
Data collection & analysis	
Process mapping	
Other (please specify)	

Document no < xxxx-xx-KN-xxx-xxxxx > Page 1
Uncontrolled when printed
© LHR Airports Ltd
Heathrow



Classification: Internal

Problem Solving Tool kit

Root cause(s) Identified

Clear statement as to how the root cause(s) lead to the problem.

Determine Solution

Identify & Verify Permanent Corrective Actions (PCAs)

Correction – Correct the problem.

Prevention – Prevent the root cause from occurring (remove the root cause)

Consider: Like to do vs. Must do
Ranking and rating of potential solutions

Implement solution

Action Plan to implement & Validate PCAs

Implement & validate PCAs.

Prevent recurrence of the Problem/Root Cause

Outcome

Results	Benefits
Monitor for improvement for a period of time. If problem still exists repeat the process.	Measured and quantified e.g. time, cost etc.

Application of learning	In CEMAR?	Yes / No
How will the learning be communicated / applied		

Recognition

How will the originator / team be recognised, and the output communicated

Document no < xxxx-xx-KN-xxx-xxxxx > Page 2
Uncontrolled when printed
© LHR Airports Ltd
Heathrow

Assemble Team & Define Problem | Interim Containment Actions | Identify & Verify Root Cause(s) | Determine Solution | Implement Solution | Outcome

GIRI

Future events

- 15th October — What does the Building Safety Bill mean for you? Weightmans/GIRI
- 19th October — GIRI forum
- 2nd November — GIRI forum
- 16th November — GIRI forum
- 26th November — Hot works webinar. Zurich/GIRI
- 30th November — GIRI forum
- 2nd December — CIOB/Fieldview/GIRI Webinar
- 14th December — GIRI forum

Questions

Conclusions

- Get to our leaders – a higher profile for getting it right
- Help us to address Judith Hackitt's frustrations
- People talking and not doing. Help us to stop that
- Please talk to us about how we can help you

THANK YOU FOR TAKING PART