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Programme assurance in an Agile environment

Rachel Saunders

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Objectives

01 What is agile?

02 What is different in agile programme development?

03 What to look out for in an audit?

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What is Agile?

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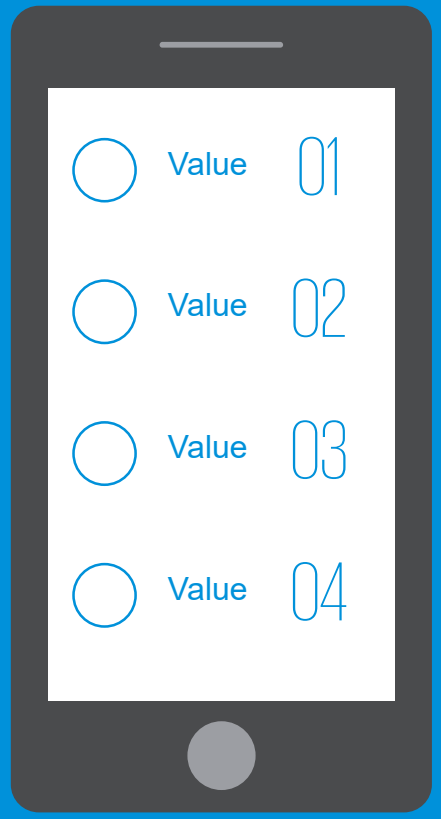
The Agile manifesto contains four values



Individuals and **interactions** over **processes** and **tools**

Working software over **comprehensive documentation**

Customer collaboration over **contract negotiation**

Responding to change over **following a plan**

That is, while there is value in the items on the right, we value the items on the left more

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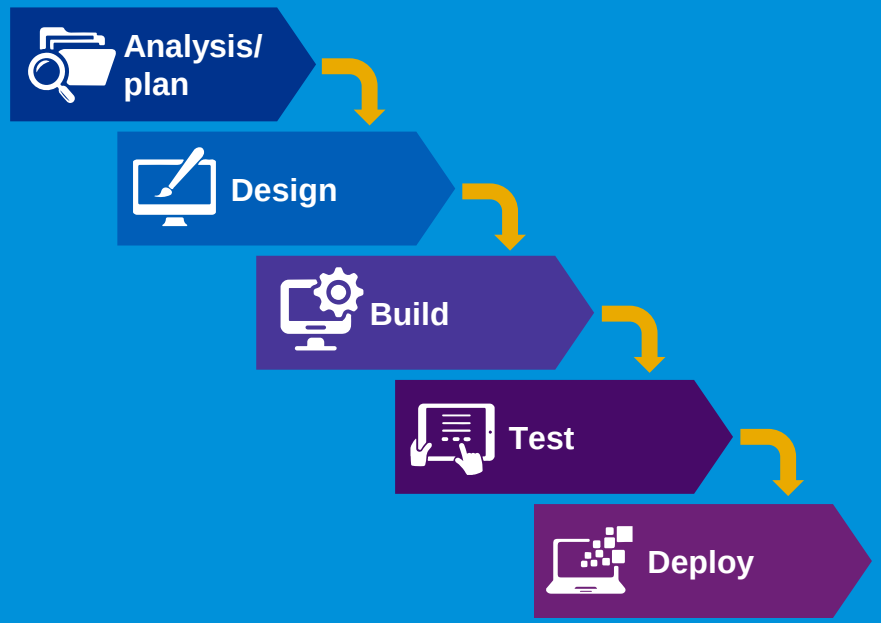
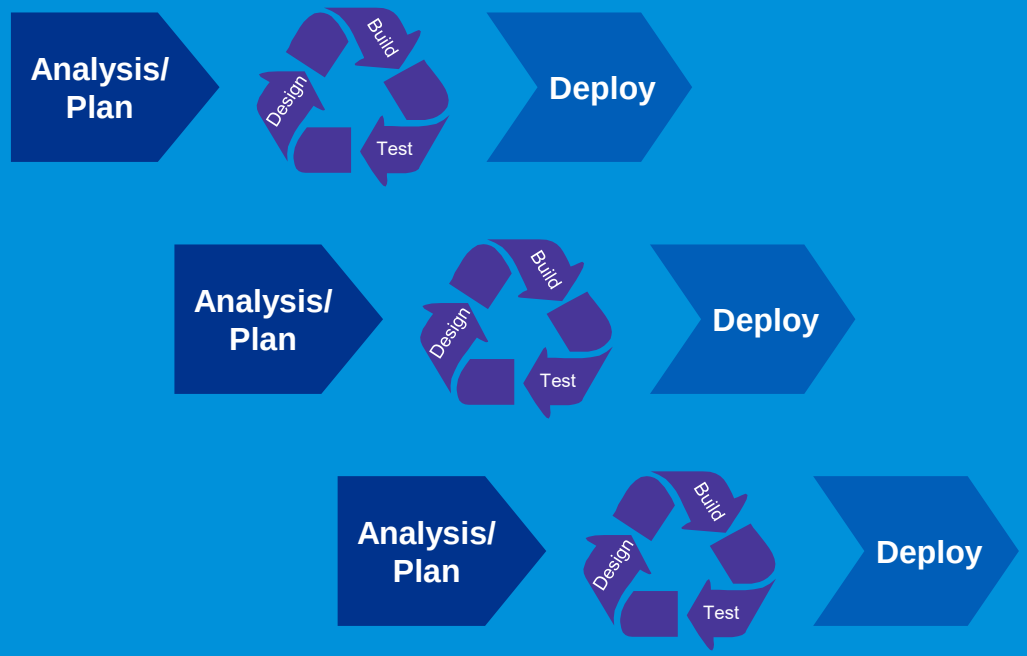
Agile and waterfall approaches

Waterfall approach



Agile



Project timeline

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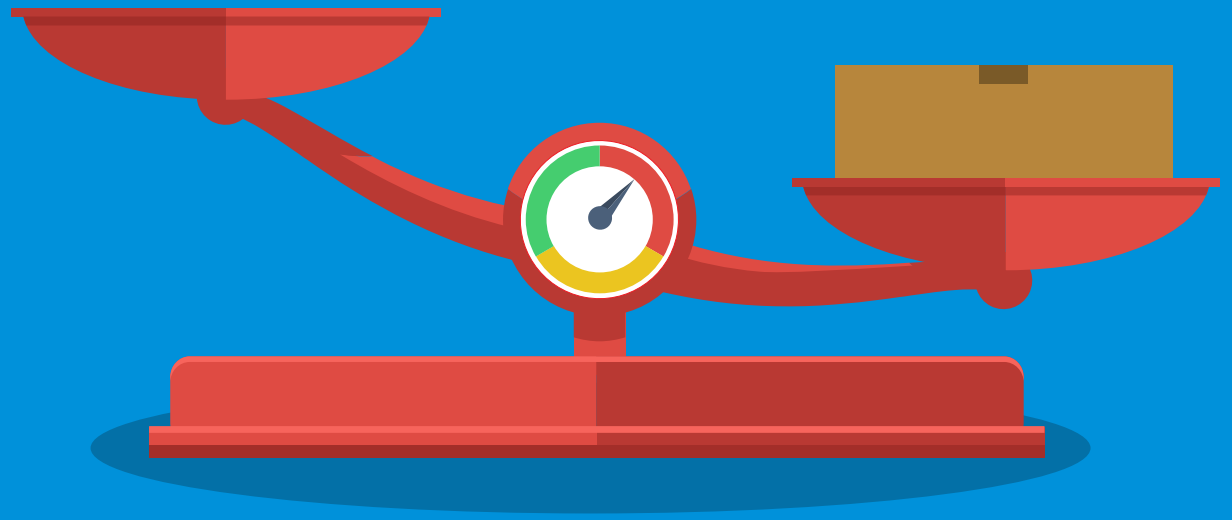
Agile and waterfall approaches (cont.)

An Agile approach changes the emphasis to working collaboratively to iterate solutions, typically software

- Processes and tools
- Comprehensive documentation
- Contract negotiation
- Following a plan



- Individuals and interactions
- Working solution
- Customer collaboration
- Responding to change

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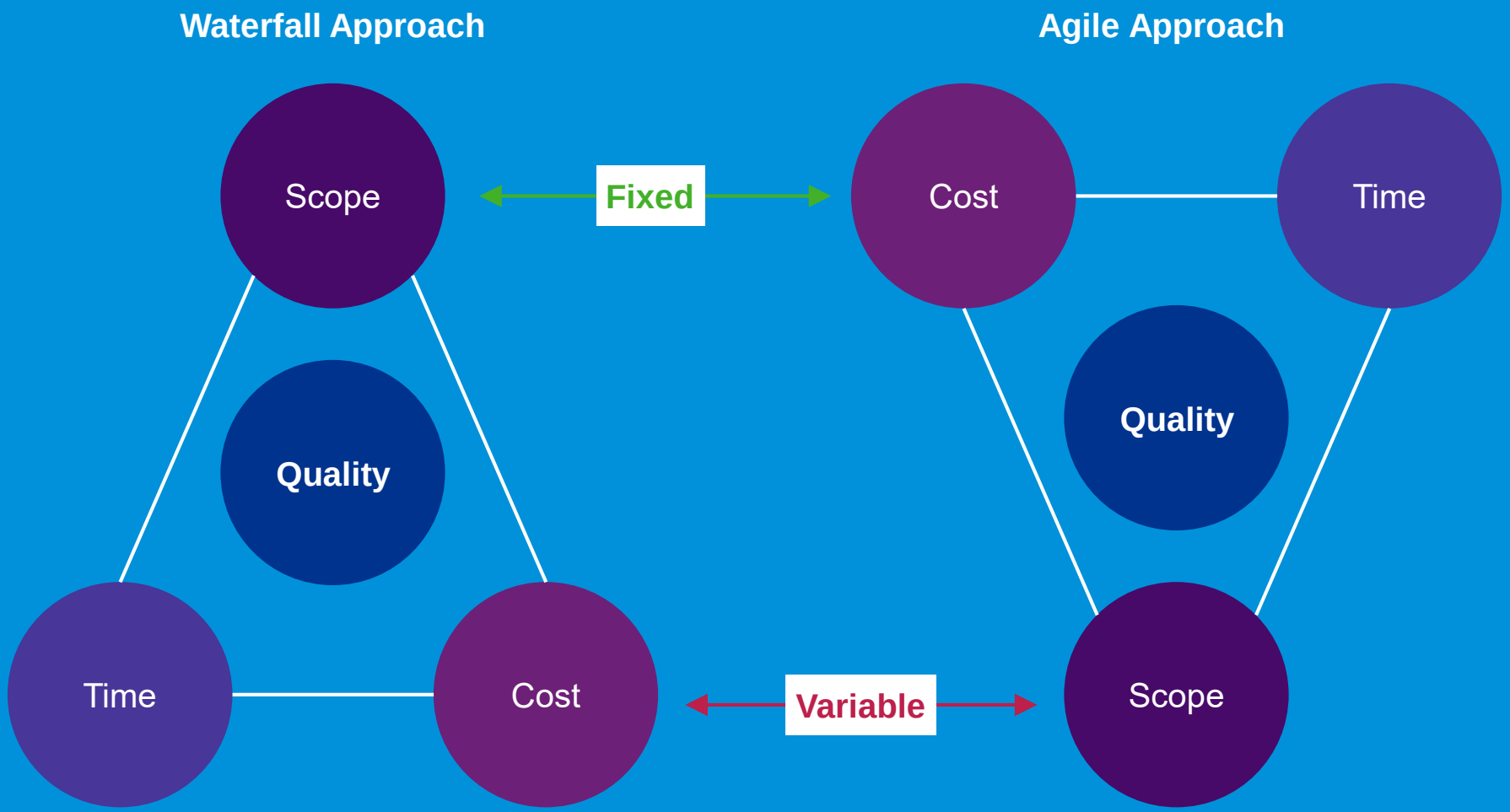
Effect of agile on the magic triangle



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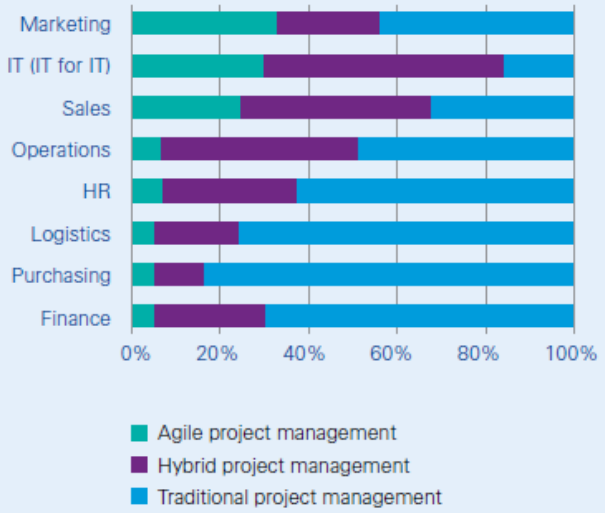
Agile adoption

Agile is most applied in projects for marketing, sales and IT



Note: What is the predominant project management approach in the following business areas in your organisation?

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Within three years, 76% of organisations expect to work more agile than traditional in their project management

Note: How are your projects currently managed and how do you expect how that will be within three years

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Maturity index for cultural agility

Level 1
Ad Hoc Agile

- Agile is either not used or used inconsistently across organisation
- Variable quality
- Predominantly manual testing
- Success achieved through heroic individual efforst

Level 2
Doing Agile

- Team start to exhibit some consistent Agile habits
- Knowledge sharing begins to occur across teams
- Agile tools and practices is common
- Quality improves

Level 3
Being Agile

- Most of the project portfolio is Agile
- Role and responsibilities are consistent across teams
- Disciplined, repeatable processes are in place with high quality results
- Respect for people and continuous improvement is occurring

Level 4
Thinking Agile

- Agile habits at a high maturity across the organisation
- Successful use of Agile at Scale
- Success across multiple geographies
- Measurement systems in place to track business value realisation
- Test and build automation is highly enabled

Level 5
Culturally Agile

- Lean and Agile are part of the organisational culture
- Perfecting wast reduction, lack of overburden and inefficiency and a smooth flow of delivery
- Sustainable pace of innovation
- Continuous organisational learning and optimisation of work process

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DevOps

ITIL Lean Agile

DevOps

— Improving collaboration between development and operations teams

— DevOps is a philosophy rather than a process.

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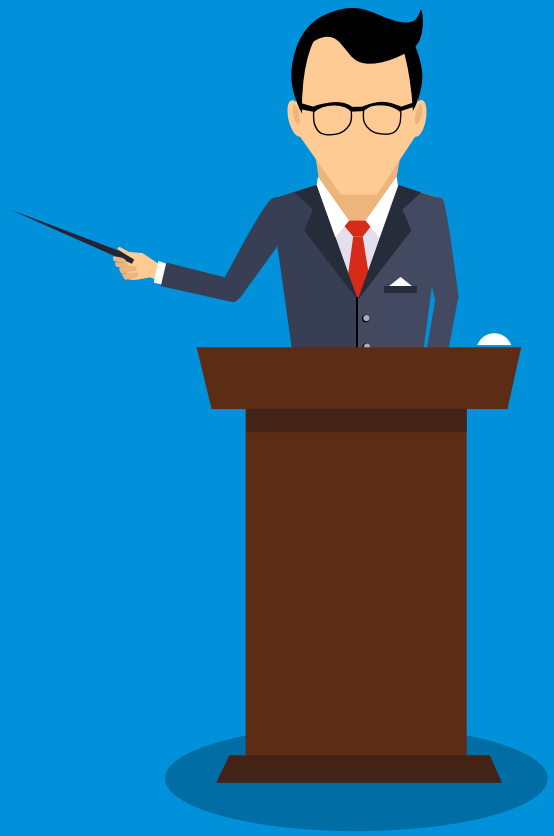
Measuring high performance

Table 2: 2017 IT performance by cluster

Survey questions	High IT performers	Medium IT performers	Low IT performers
Speed			
Deployment frequency *For the primary application or service you work on, how often does your organization deploy code?*	On demand (multiple deploys per day)	Between once per week and once per month	Between once per week and once per month*
Lead time for changes *For the primary application or service you work on, what is your lead time for changes (i.e., how long does it take to go from code commit to code successfully running in production)?*	Less than one hour	Between one week and one month	Between one week and one month*
Stability			
Mean time to recover (MTTR) *For the primary application or service you work on, how long does it generally take to restore service when a service incident occurs (e.g., unplanned outage, service impairment)?*	Less than one hour	Less than one day	Between one day and one week
Change failure rate *For the primary application or service you work on, what percentage of changes results either in degraded service or subsequently requires remediation (e.g., leads to service impairment, service outage, requires a hotfix, rollback, fix forward, patch)?*	0-15%	0-15%	31-45%

* *Note: Low performers were lower on average (at a statistically significant level), but had the same median as the medium performers.*



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Controls and the role of audit

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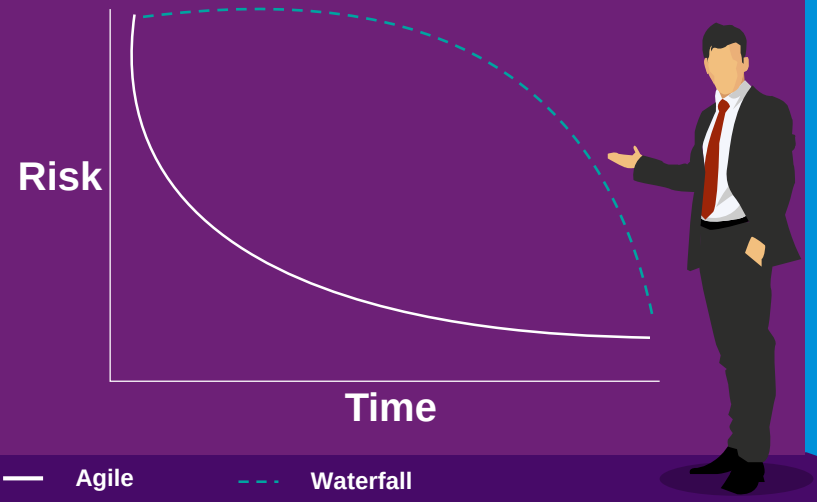
Program development risks

Program development risks:

- Changes to the control environment
- Implementation process
- Data migration

Program development may impact the financial processes within the business, and any significant failure can have far reaching impacts.

How does agile change the risk profile?



Do multiple layers of governance improve the quality of technical solutions?

speed up delivery? or reduce risk?

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Agile controls

02

Acceptance: Business owner regularly checks that the expected levels of quality are reached through acceptance of each iteration, and provide actionable feedback to the team on quality and value generation

Change control: Impact analysis, change request and change approval. Emergency change process for expedited changes to solve or prevent a production issue

03

04

Separation of environments: Separation exists between development, test, acceptance, pre production and production environments

01

Peer review: The delivery team will review each other's work during each iteration. Team members will test that the system meets the acceptance criteria, as well as the expected standards

05

Segregation of duties: Logical access prevents developers from accessing the production environment.

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Agile governance

Adopt a lean approach: Governance should be proactive and light touch. There should be an appropriate level of monitoring to assure progress, but not stifle the focus on delivery

Checks and balances: Agile teams should decide on the metrics they will use and self monitor. The one metric that matters should be the value of outputs to the business

Devolution is key: The organisation should be prepared to delegate, empowering the Product Owner and, in turn, the Agile Team to succeed

Focus on behaviours: Continually reviewing through observation rather than reliance on processes and documentation

Customers control the perception of quality: The business owner and the delivery team defines the acceptance criteria, and the iterative process ensures continual review and feedback

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Independent programme assurance

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The playing field ...

- **17%** of large change projects[(a)] **fail** to the extent that they jeopardise the company's existence
- The average cost of failure is **£8 million**[(b)]
- Senior Manager Regime (SMR) will hold senior executives **responsible** for failure
- KPMG has great credentials in programme/quality assurance that can help clients **avoid** reputational damage, mitigate risks and implement successful projects and programmes
- Our reviews helped a client **avoid** cost overruns and realised savings of **£75 million**
- We need Client Lead Partners and other colleagues to identify major change programmes (e.g. transformation, Brexit, ICB etc.) and to discuss with client's the value that this service can bring

Note: (a) McKinsey research 2012. http://www.mckinsey.com/insights/business_technology/delivering_large-scale_it_projects_on_time_on_budget_and_on_value
(b) KPMG Project and Programme Management Survey

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Programme success factors

Change programmes are large scale, complex and time consuming.

Change is a journey

Large implementations or change programmes are often considered a one-off exercise; not a journey …

Set up for success

Many organisations are starting to use Agile for their programmes, but few know enough about how an Agile progamme operates to know how to structure the organisation for success

Ensure a clear vision

Many organisations do not have a clear vision of the objectives they want to achieve from the change they are making in the short and long term

Embedding change

A system implementation alone will not deliver business transformation without a significant investment in change management and embedding a change culture

Relentless focus on benefits

Delivery of the business case must be a key focus of the project. All decisions on scope, functionality and planning changes must be challenged and validated

Proper design is critical

Efforts are often focused on the build and deployment rather than design. As a result, projects become IT-driven and lack engagement from the business

The average cost overrun of all projects is 27%.' – Harvard Business School

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Types of AQA review

Healthcheck/programme reviews

- Broad scope, limited depth
- Topics such as governance, programme management and planning, risk and issue management and delivery approach
- Done at any time – Useful at early stage of assurance to inform the assurance plan
- Delivers prioritised observations and recommended actions to reduce risks

This review seeks to answer the question: 'Is the programme set to succeed?'

Stage Gates and Check Point reviews

- These are designed to provide reviews at key stages of the programme, to ensure phases are entered and exited safely. These regular reviews build stakeholder confidence in the programme and inform our work

Deep Dive reviews

- full depth focus
- Topics are identified risk area(s) such as Data migration or Testing
- Delivered by Subject Matter Experts

Specific 'deep-dive' focus on key areas of risk and typically make use of SME to provide assurance

Continuous Assurance

- Provides challenge at governance forums
- Maintains understanding of programme priorities and risks

Continuous Assurance points provides regular Challenge and Expertise to Programme Leadership, Executives and Governance bodies.

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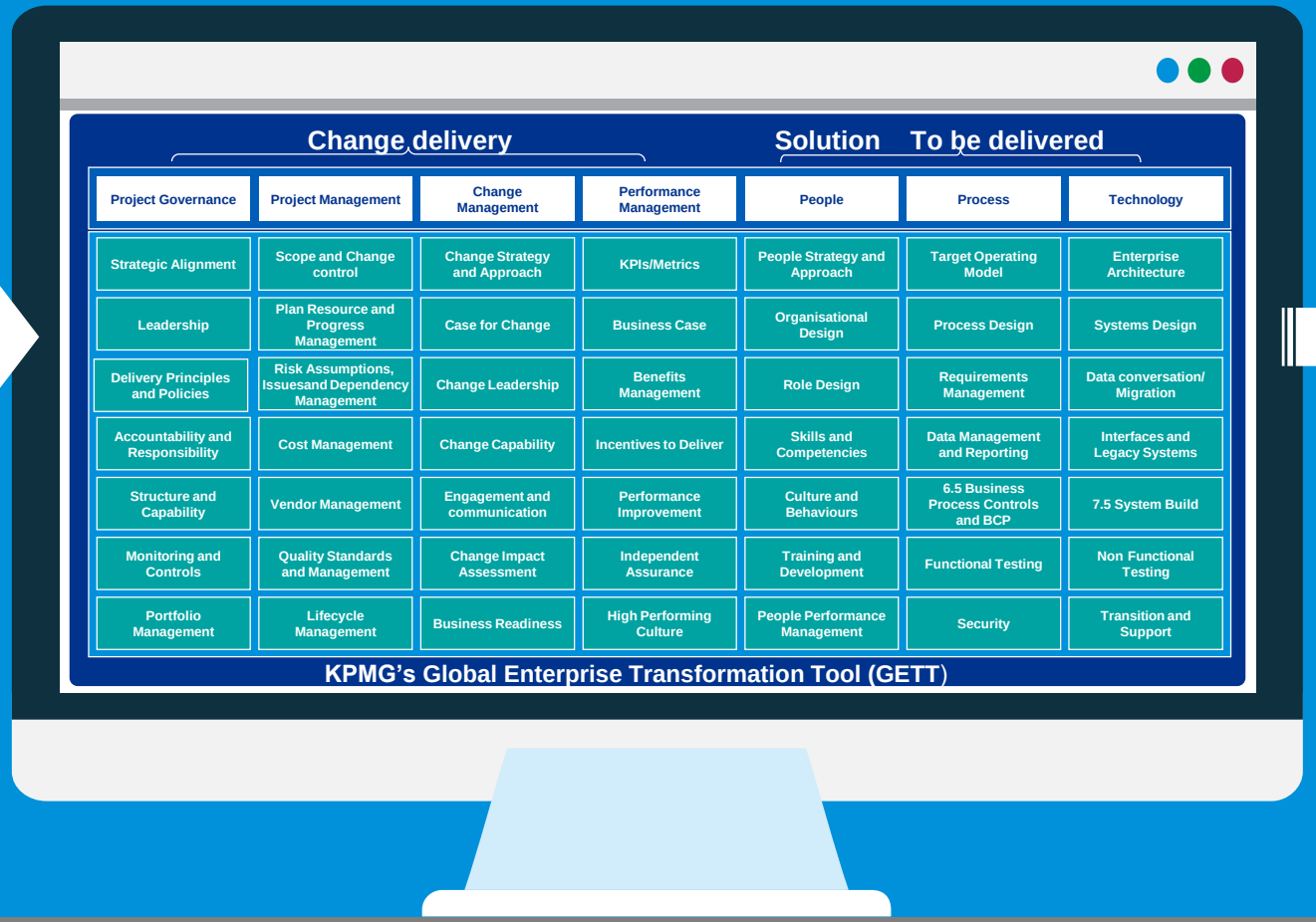
The toolkit - GETT

Inputs

- Key inputs to our assessment include programme documents such as Charters, Organisation Charts, Governance structures, Design Documents and Programme Reports
- Analysis off these documents is supported by a series of stakeholder interviews and attendance at key governance fora
- These jointly inform our analysis and assessment work



Outputs

- Heatmap style output
- Comparative output
- Risk
- Guide the overall assurance plan and focus the scope for individual 'Deep Dive' programme reviews
- Our initial review will confirm the key risk areas to be examined in our later deep-dive reviews as well as identifying areas for remediation

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GETT Heatmap style report

Suited to broad Programme Reviews and Healthchecks and can be used as mechanism to track risks during a Continuous Assurance style approach.

Programme Governance	Programme Management	Change Management	Performance Management	People	Process	Technology
Strategic Alignment	Scope and Change Control	Change Strategy and Approach	KPI's and Metrics	People Strategy and Approach	Target Operating Model	Enterprise Architecture
Leadership	Plan, Resource and Progress Management	Case for Change	Business case	Organisational Design	Process Design	Systems Design
Delivery, Principles and Policies	Risk, Issues, Assumptions and Dependency	Change Leadership	Benefits Management	Role Design	Requirements Management	Data Conversion/ Migration
Accountability and Responsibility	Cost Management	Change Capability	Incentives to deliver	Skills and Competencies	Data Management	Interfaces and Legacy Systems
Structure and Capability	Vendor management	Engagement and Communication	Performance Improvement	Culture and Behaviours	Business Process Controls and BCP	System Build
Monitoring and Controls	Quality Standards and Management	Change Impact Assessment	Independent Assurance	Training and Development	Functional Testing	Non Functional Testing
Portfolio Management	Lifecycle Management	Business Readiness	High Performing Culture	People Performance Management	Security	Transition and Support

Key
Green – Low Risk
Amber – Moderate Risk
Red – Serious Risk
Blue – Awaiting information before providing an opinion
White – Not Applicable Out of scope

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Client cases

Internal Audit Co Source with L&G

We had a co-source agreement with Legal and General, which only ended when we won the external audit.

We carried our reviews on a number of their change programmes including:

- Change process review
- Outsourcing programme
- Relocation/headcount reduction programme
- Digital/Agile review
- Robotics business case
- Re organisation review
- Data programme
- Etc.

"I'm sorry we won t get the chance to work together on a co source basis given KPMG s winning bid for the external audit tender for L&G. I've greatly enjoyed working with you in 2016 and wish you all the best for the future."

Ian Page – Head of Audit (IT and Change)

Risk Review at Direct Line Group

The client was undertaking a major £400 million programme to transform its Personal Lines business across products, people, process and technology

As a consequence of KPMG having already provided highly effective oversight to one of the client s previous high risk technology programmes, the client invited KPMG to tender for work as the independent programme oversight for this major transformation programme

The programme had a number of high risk factors, including implementation of new technology untested in the UK market, and employing agile development methods unproven within the client s organisation

KPMG s lightweight approach was designed to minimise impact on the programme and to work in an integrated fashion with the client s 3rd Line risk function to ensure a joined up approach to assurance

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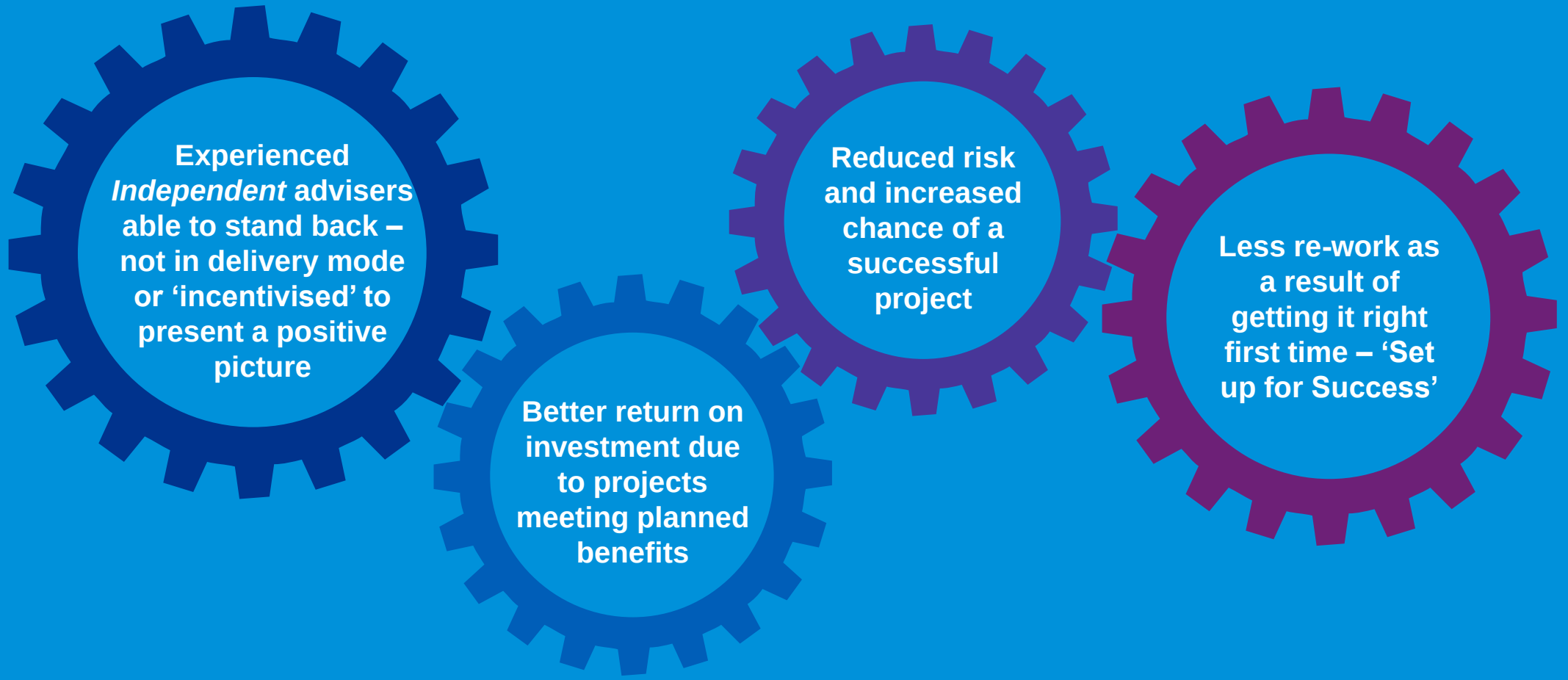
Client benefits



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Who are the buyers?

Non-Executive Directors (NEDs)

Benefits

- Gain assurance that the strategic change initiative is under control
- Attain a better understanding of the conclusions the regulator would reach if they were to review the programme now
- Gain an independent assessment of programme leadership

Questions for clients

- Do you know the responsibilities you have to the programme?
- How will you demonstrate you are discharging your responsibilities to regulators?
- Do you understand the impact of programme failure?

CRO/Head of Internal Audit

Benefits

- Gain assurance that the right risk oversight and audit challenge can be demonstrated
- Obtain assurance that the programme is delivering fair customer outcomes
- Acquire assurance that the outsourcing of functions is being carried out optimally by the programme

Questions for clients

- Do you know the responsibilities you have to the programme?
- How will you demonstrate you are discharging your responsibilities to regulators?
- Do you understand the impact of programme failure?

CEO/CFO/ Programme Sponsor

Benefits

- Get an independent assessment that demonstrates that senior executives have got the programme under control
- Obtain assurance that the programme is delivering fair customer outcomes
- Acquire assurance that the outsourcing of functions is being carried out optimally by the programme

Questions for clients

- Do you know the responsibilities you have to the programme?
- How will you demonstrate you are discharging your responsibilities to regulators?
- Do you understand the impact of programme failure?

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Contact

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