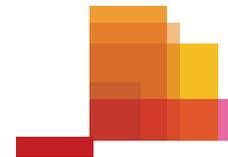


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# ***SDLC- Key Areas to Audit in IT Projects***

***ISACA Geek Week 2013***

***8/21/2013***



**pwc**



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# *Introductions and Projects Overview*

***1***

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## ***Presenters***

**Charlie Miller**

**and**

**Andrew Gerndt**

The Coca-Cola Company

Principal IT Auditors

Atlanta, GA

CISA

**Mike Shipham**

PricewaterhouseCoopers LLP

Project Assurance Director

Chicago, IL

CISA and PRINCE2



# *Agenda*

<b>Topic</b>	<b>Timing</b>
1. Introductions and Projects Overview	15 minutes
2. IT projects- the risks	15 minutes
3. Key areas to audit	20 minutes



# Coca-Cola at a glance



**280+**

We support more than 280 physical activity and nutrition education programs in more than 115 countries, and we are committed to having a program in every country where we operate by 2015.



**127**  
YEARS  
— OF —  
HAPPINESS

**3500+**



**PRODUCTS  
WORLDWIDE**



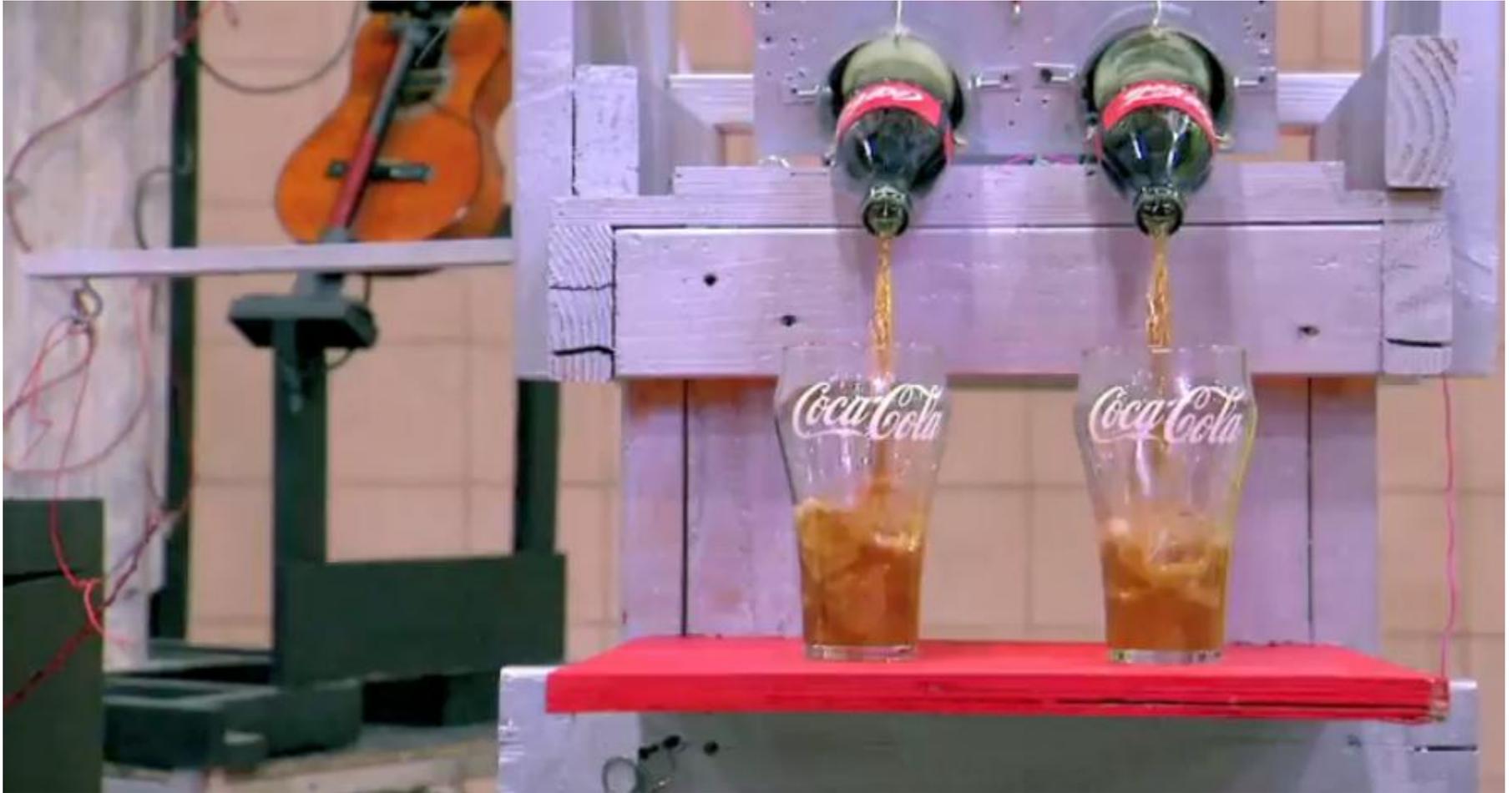
**BECAME THE FIRST BRAND TO RECORD 50 MILLION "LIKES" ON FACEBOOK (SEPTEMBER 2012).**

FWC

2012 Worldwide Unit Case  
Volume Geographic Mix



## *Project- sharing a Coke*



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## *Getting to know you*

1. Are you involved in an IT project at your company?
2. How has Internal Audit been involved in this project?
  - a. Mostly in planning
  - b. Mostly in execution
  - c. Doing a post implementation review
  - d. Not at all

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## *Getting to know you*

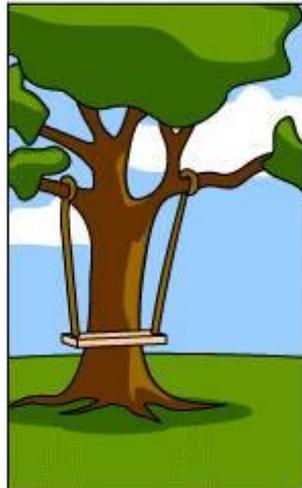
1. What has been the greatest challenge with this project?
  - a. Planning
  - b. Execution
  - c. Post implementation
  - d. Other



# Sound familiar?



How the customer explained it



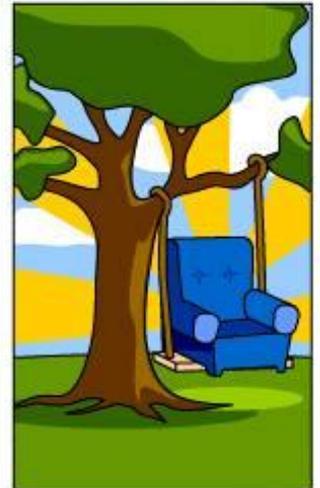
How the Project Leader understood it



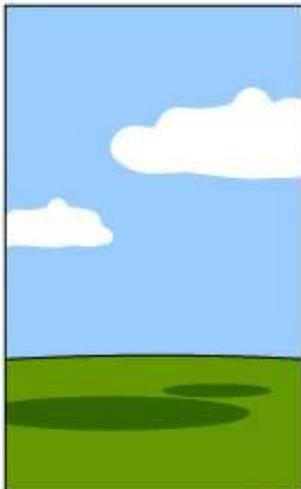
How the Analyst designed it



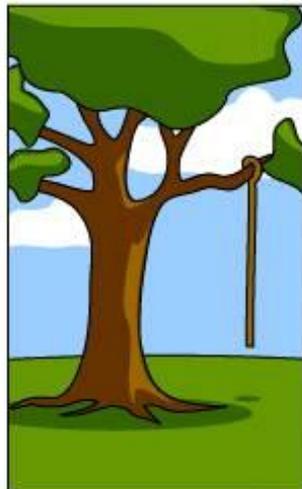
How the Programmer wrote it



How the Business Consultant described it



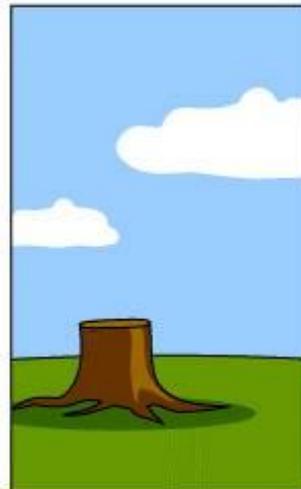
How the project was documented



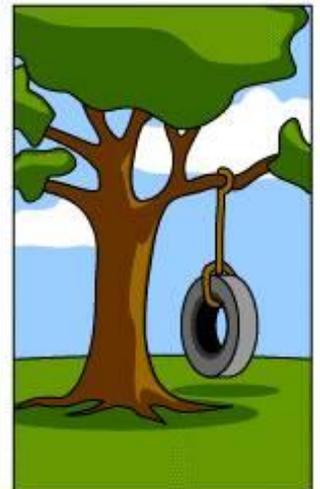
What operations installed



How the customer was billed



How it was supported



What the customer really needed



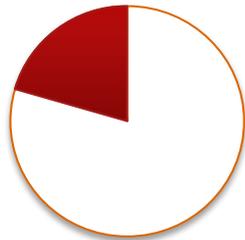
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# *IT Projects – the risks*

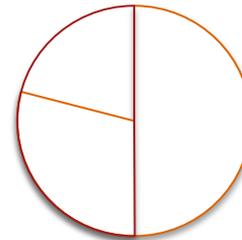
2

# Are IT projects successful?

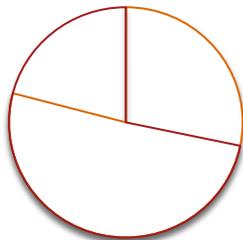
PwC's 2012 survey indicates that 200 global companies were **spending over \$4.5 B on projects** to deliver changes required to implement their strategy.



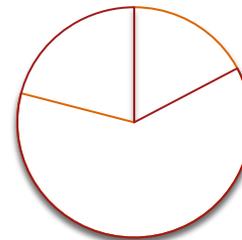
20% of ERP implementation projects are not completed.  
*(Gartner)*



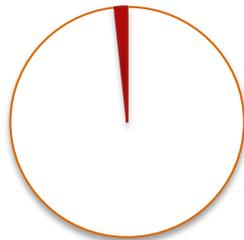
51% of ERP implementation viewed as a failure  
*(Robbins-Gioia Survey)*



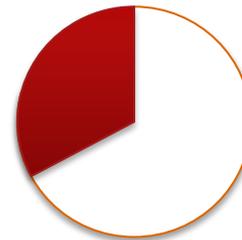
71% of ERP projects do not meet the expectations of senior management  
*(CSC Index/AMA Survey)*



84% of projects do not meet **all** criteria for success  
*(Standish Group)*



2%: Companies that had 100% of their projects on time, within budget, to scope and delivering the right business benefits.  
*(PwC Global Survey on State of Project Management)*



35%: Number of companies where system projects deliver expected business benefits  
*(PwC Global Survey on State of Project Management)*

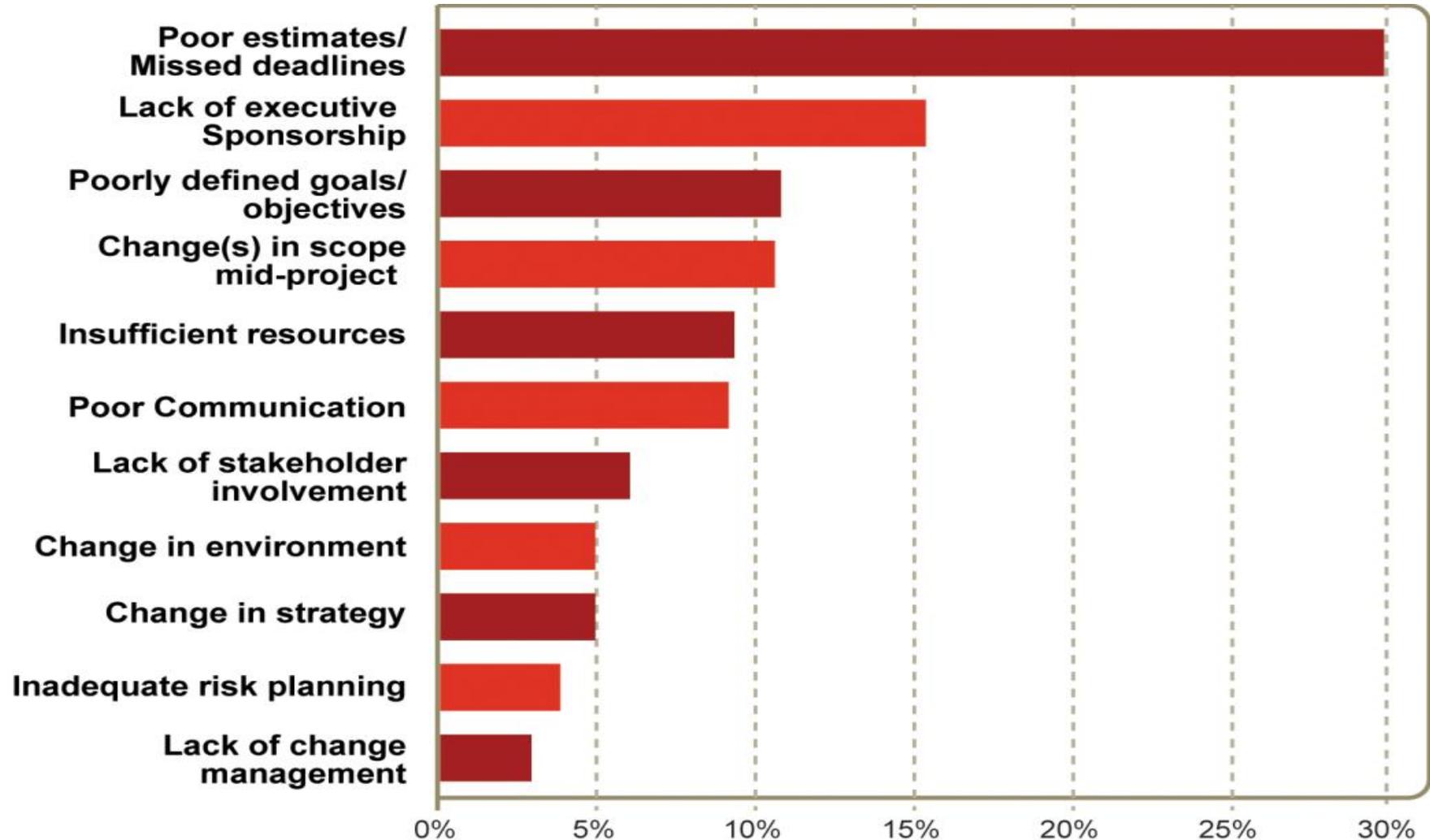
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## *IT project risks*

In your experience, what IT project risks have you seen?



# Reasons for program failures



Source: PwC's 3<sup>rd</sup> Global Survey on State of Project Management (2012)



# Key areas of project risk

Risks are not isolated to classic project management artifacts, but extend to a broader 'risk universe'.

## Technology

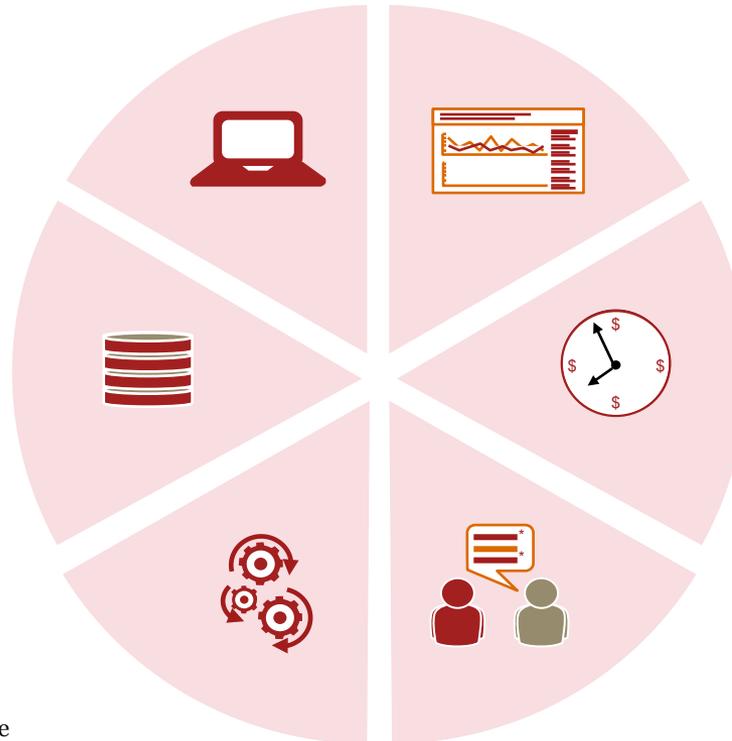
- Infrastructure
- System architecture
- Networking
- Security
- Availability
- Performance
- Disaster recovery

## Data

- Data Structures
- Mapping
- Cleansing Effort
- Conversion and validation
- Data governance
- Backup and recovery
- BI and reporting strategy

## Process and Solution

- Requirements
- Business processes
- System Development Life Cycle
- Data
- Controls
- Bolt-ons
- Interfaces/integrations



## Governance

- Strategic Alignment
- Senior Management Commitment
- Sponsorship / Champions
- Governance and Decision making
- Synergy identification and tracking

## Program Management

- Time schedules
- Budgets
- Resources/staffing
- Vendors
- Knowledge transfer
- Issue and Risk management
- Scope management

## Organization

- Business impacts
- Training
- Communication
- Organizational alignment
- Change management
- Compliance and controls
- Business continuity



---

*Key areas to audit*

3

# ***PM Maturation Model***

Maturity Levels	Characteristics
5. Enterprise Standards and Program Management Culture Exists	<ul style="list-style-type: none"> <li>■ Strategic resource management crosses the enterprise</li> <li>■ Program value management occurs through project portfolio management, prioritization and interdependency management</li> <li>■ Change issues address organizational design and culture change</li> </ul>
4. Cross Business Unit Program Management Implemented	<ul style="list-style-type: none"> <li>■ Measures of process quality are collected and processes are managed</li> <li>■ Process performance target zones are established</li> </ul>
3. Programs Managed with a Strategic Enterprise Focus	<ul style="list-style-type: none"> <li>■ Management processes address multiple projects</li> <li>■ A PMO is used for efficiency and risk management is proactive</li> <li>■ Projects and programs assume a strategic focus with status visibility provided to a wider stakeholder audience</li> </ul>
2. Stable Project Management Processes	<ul style="list-style-type: none"> <li>■ Work projects are controlled and basic PM capability established</li> <li>■ Management visibility into project status at predefined checkpoints and milestones and react to problems as they occur</li> <li>■ Initial use of metrics at the project performance level</li> </ul>
1. Unstable Project Performance (Ad Hoc)	<ul style="list-style-type: none"> <li>■ Processes poorly defined</li> <li>■ Managers have little visibility into status and processes employed</li> <li>■ Success achieved through "heroics"</li> </ul>

# Who plays a part in managing program risk?

Large transformation projects typically have a number of functions supporting risk and quality management. Understanding the respective roles and levels of assurance provides a holistic view of current assurance levels and helps identify the gaps that may need to be addressed.



## Work stream monitoring activities

Examples of Level 1 activities:

- Program risk function
- Program PMO
- Vendor PMO & QA

## PMO monitoring and assurance activities

Examples of Level 2 activities:

- **Operational risk** teams
- Compliance teams
- Organizational or independent PMO
- Targeted QA activities (from within the organization but independent of the project)

• Product vendor provided assurance

## External vendor and internal audit

Examples of Level 3 activities:

- Internal Audit reviews (part of the annual plan)
- 'Health checks' and targeted specialist 'Deep Dive' reviews
- External Audit reviews

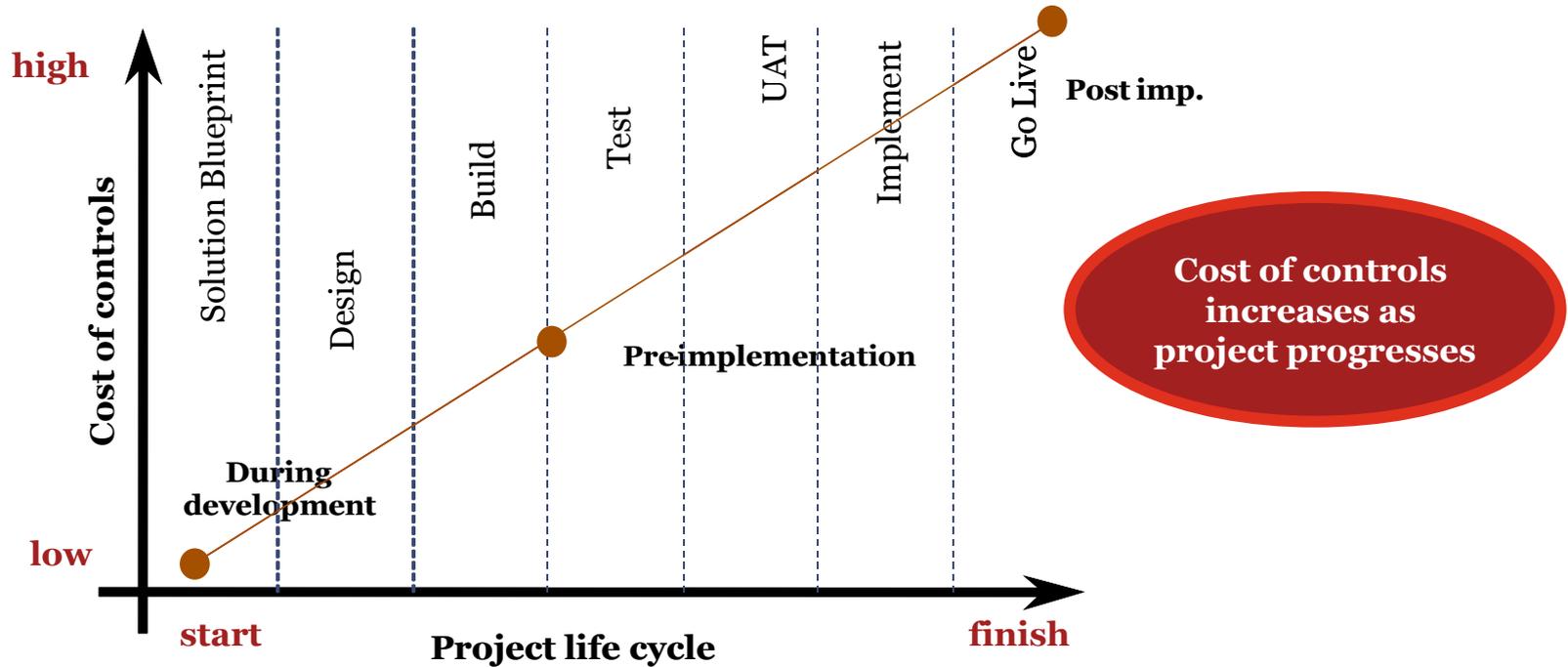


# *How can audit add value to a project?*

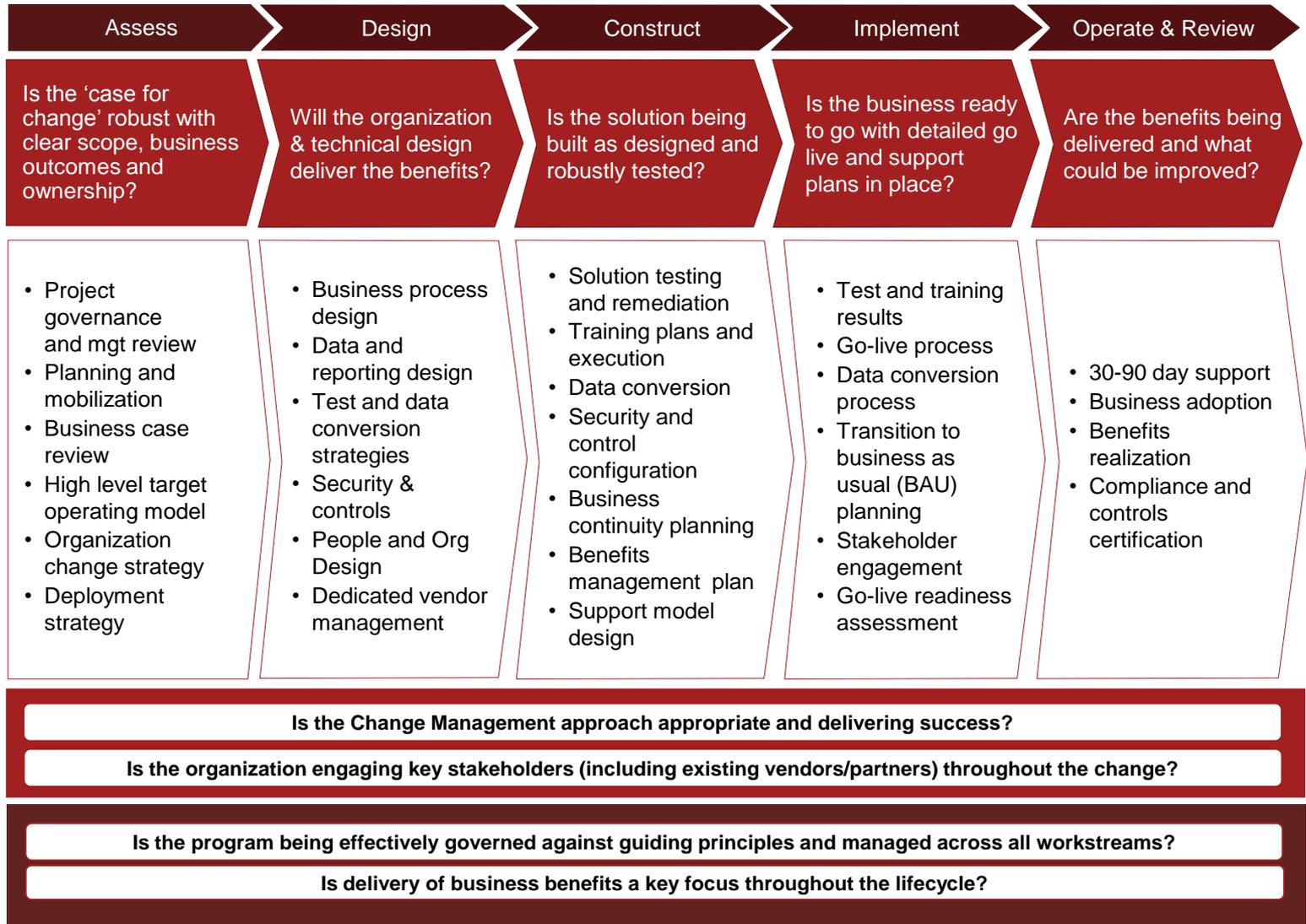
<i>1. Navigate the integration risk landscape</i>	<i>2. Understand stakeholder perspectives and provide deeper insights</i>	<i>3. Cut through the clutter</i>
<b>Questions</b>		
How well aligned is internal audit's plan with the critical risks facing the organization?	Does internal audit provide a point of view to help the business improve its responses to risk?	How effectively does internal audit communicate with stakeholders?



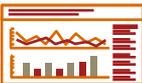
# How can audit add value? Controls are often overlooked



# Managing risk over the program lifecycle



Delivering Change



Driving Change



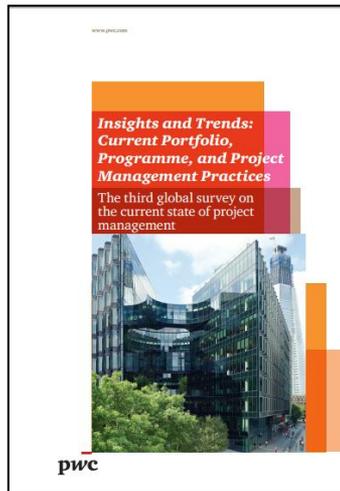
PwC

# Further reading and Appendix Slides



## Internal Audit's Role in Transformational Change

[http://www.pwc.com/en\\_US/us/risk-assurance-services/publications/internal-audit-transformational-change.jhtml](http://www.pwc.com/en_US/us/risk-assurance-services/publications/internal-audit-transformational-change.jhtml)



## Insights and Trends: Current Portfolio, Programme, and Project Management Practices (our 3<sup>rd</sup> global survey)

[http://www.pwc.com/en\\_US/us/public-sector/assets/pwc-global-project-management-report-2012.pdf](http://www.pwc.com/en_US/us/public-sector/assets/pwc-global-project-management-report-2012.pdf)



## Reaching Greater Heights: Are You Prepared for the Journey? 2013 State of the Internal Audit Profession Study (our 9<sup>th</sup> annual survey)

[http://www.pwc.com/en\\_US/us/risk-assurance-services/publications/assets/pwc-2013-state-of-internal-audit-profession-study.pdf](http://www.pwc.com/en_US/us/risk-assurance-services/publications/assets/pwc-2013-state-of-internal-audit-profession-study.pdf)

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## ***For more information: Contact***

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Director

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# *Thank you*



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# Video



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# ***Appendix Slides- Examples of control considerations by project phase***



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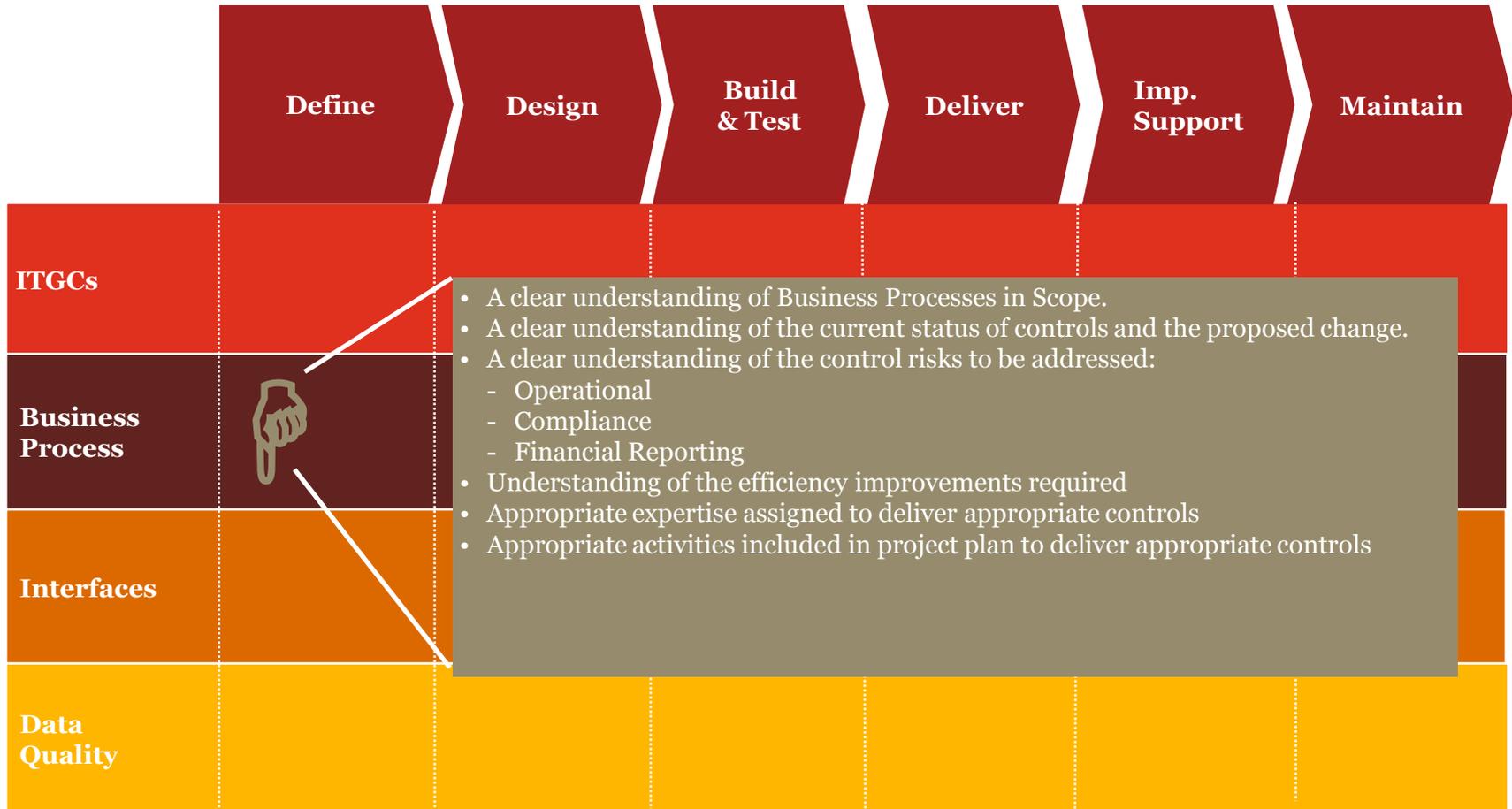
# ***Top 10 Keys to success***

## **Key events that may contribute to a successful Project Audit:**

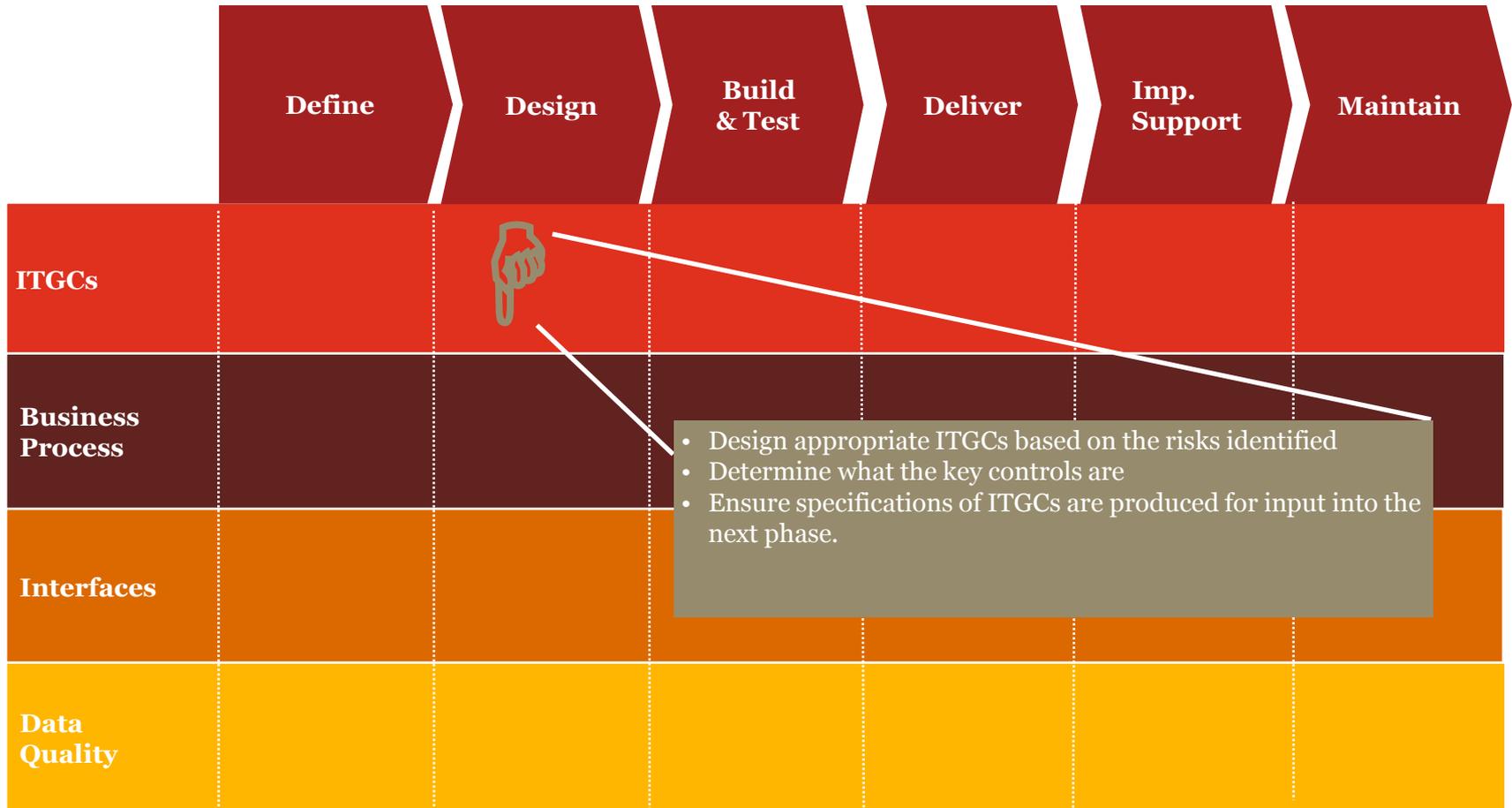
1. Stakeholder buy-in & tone at the top, understanding & acceptance of engagement
2. Staffing, proper technical skills, qualifications and capabilities allowing the team to quickly establish credibility
3. Understanding project needs and expectations, as well as the level of comfort desired
4. Scoping appropriately, leveraging a risk based approach and delivering upon the agreed scope
5. Up-front communication regarding scope of review, extent of review, timing of review and level of details to be provided in reporting
6. Execution and completion of work within defined budget and schedule
7. Change agility, being able to change with the project needs (adjust timeline, etc.) but avoiding scope creep
8. Communication to all parties
9. Relevance, providing actionable useful and timely deliverables (reporting) – consider requirements of the audience (i.e. Audit Committee, Sponsor, Project Manager, etc.)
10. Monitoring project progress between checkpoint reviews to minimize ramp-up time required at each checkpoint



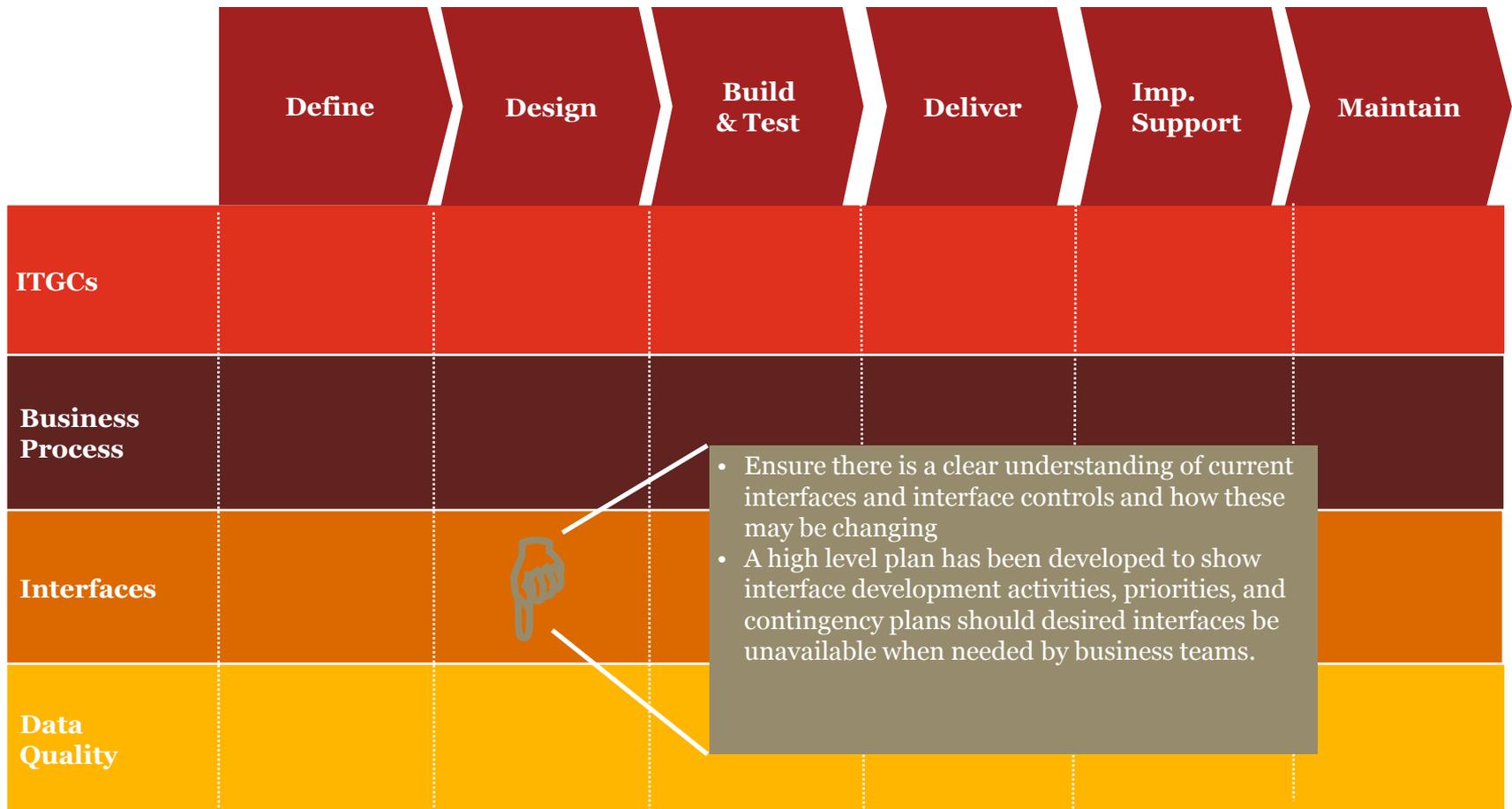
# Project assurance – Control considerations



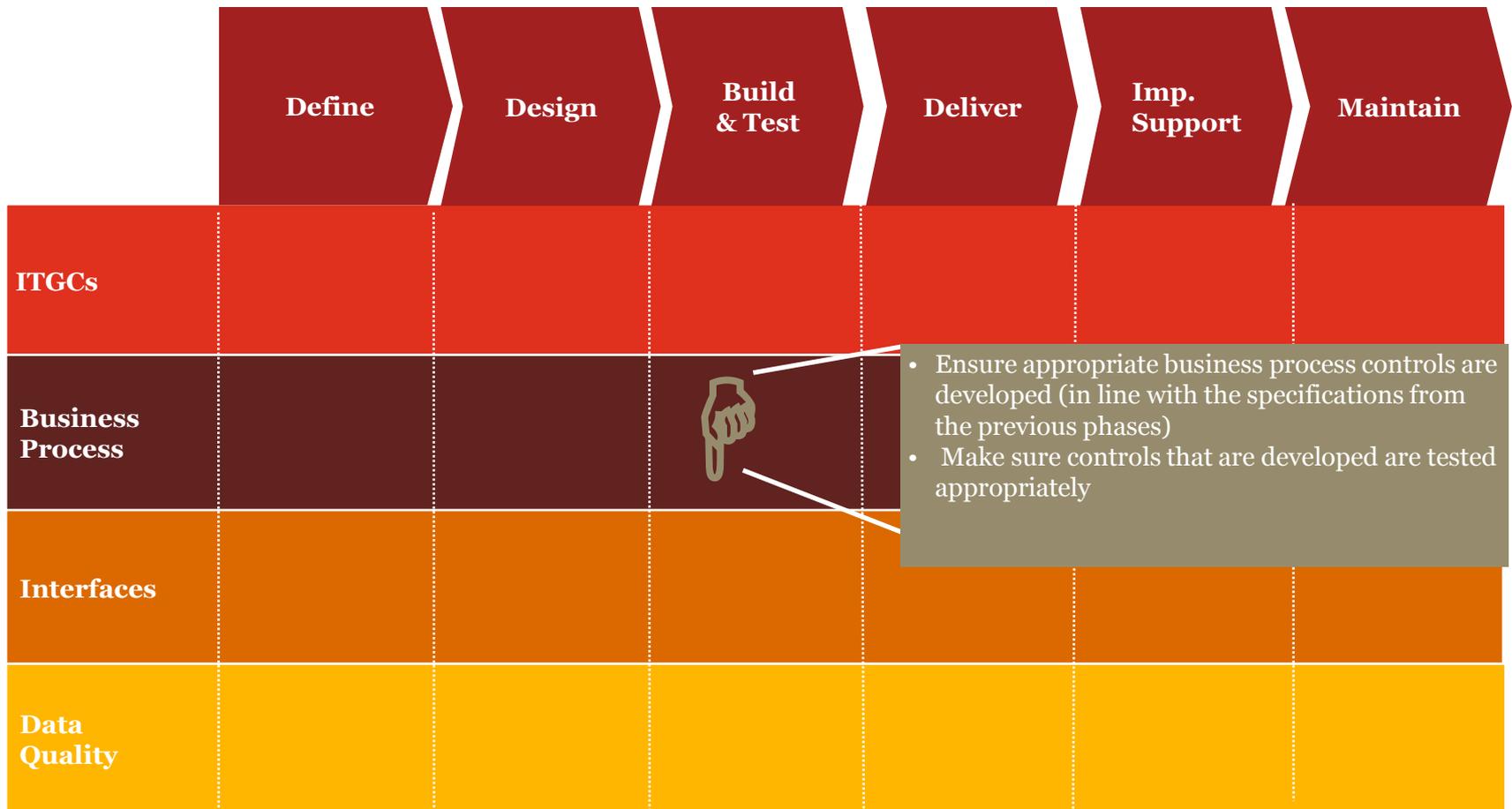
# Project assurance – Control considerations



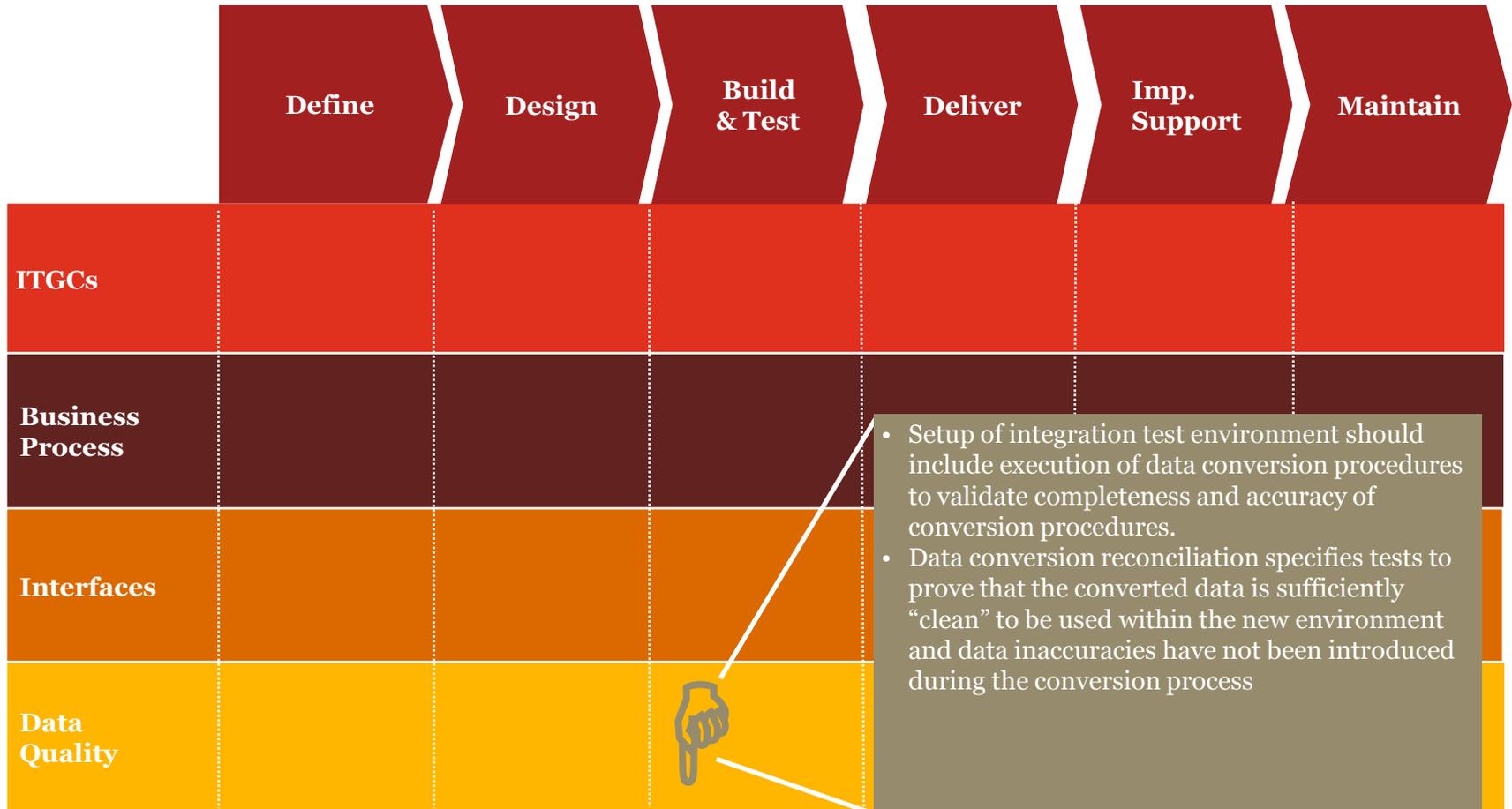
# Project assurance – Control considerations



# Project assurance – Control considerations



# Project assurance – Control considerations



# Project assurance – Control considerations

