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Adding Strategic Value with Project Assurance

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Welcome and Introduction

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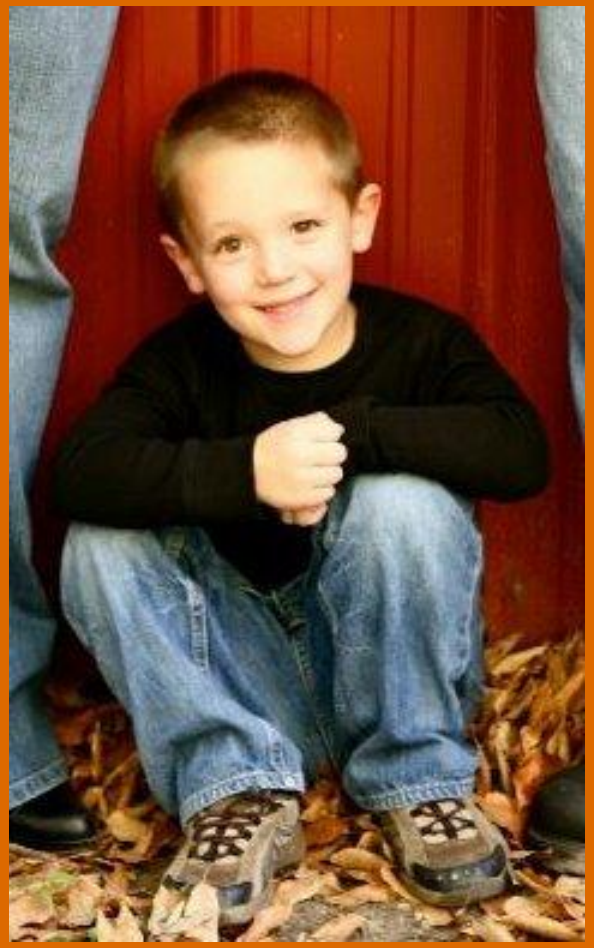


Anthony Canning
IT and Project Assurance

Today's Agenda

Becoming Relevant

Historical Perspectives

Taking Action

Project Delivery

Becoming Relevant: Stakeholders' Perspective on Internal Audit

Stakeholders' Perspectives on the Future of Internal Audit

The focus of internal audit, controls & compliance organizations should evolve and align with emerging / changing risks:

Strategic Alignment of Internal Audit's Plan

- **Focus** should be on processes that are critical to shareholder value
- **Scope** should be directly linked to the organization's strategic themes and critical processes
- Resources **prioritized** toward projects with potential for greatest impact

Strategic & Business 60%

Operational 20%

Compliance 5%

Financial 15%

Becoming Relevant: Corporate Strategies

Growth and Risk are Back in the Spotlight

Confidence levels are rising across the board, with 51% of global CEOs very confident of growth prospects over the next 3 years.

Just two years after the depths of the worst economic crisis in 75 years, CEOs have a strong but cautious optimism.

Continues to be a Significant Investment in IT Across Industries

IT is a key enabler of many growth initiatives

In midst of significant ERP upgrade cycle for key vendors

Opportunities to leverage IT to reduce costs (shared service, cloud, etc.)

Projects are increasingly complex, frequently requiring collaboration across geographies and organizations

Management is questioning current value from their systems investments - increased focus on delivery of business benefits

Polling Question – show of hands

Does your organization have ERP / systems based projects going on now?

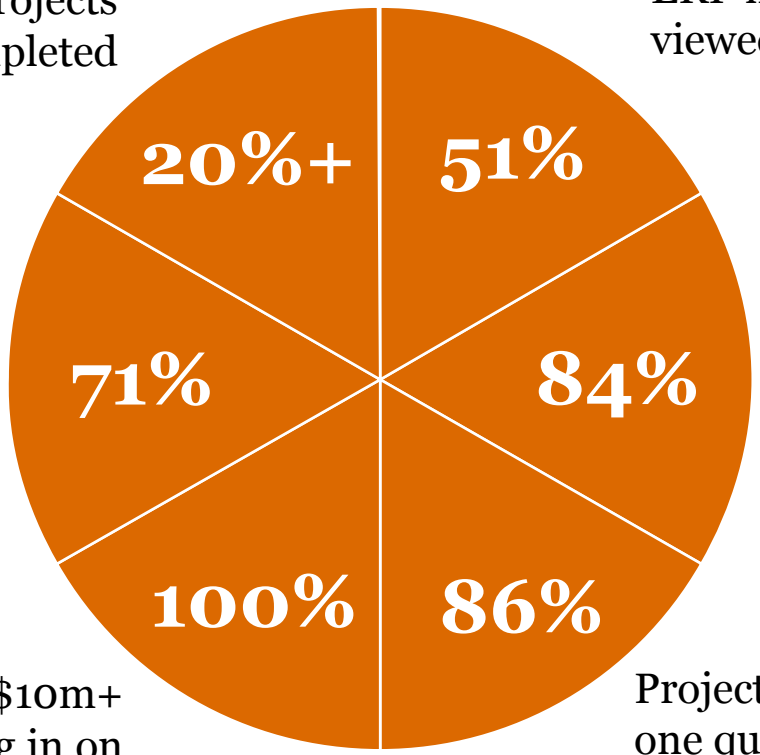
Are you involved in some capacity?

Historical Perspectives: Do Projects Deliver?

Do Significant Organizational Projects Deliver?

ERP implementation projects that are not completed

ERP implementations viewed as business failures



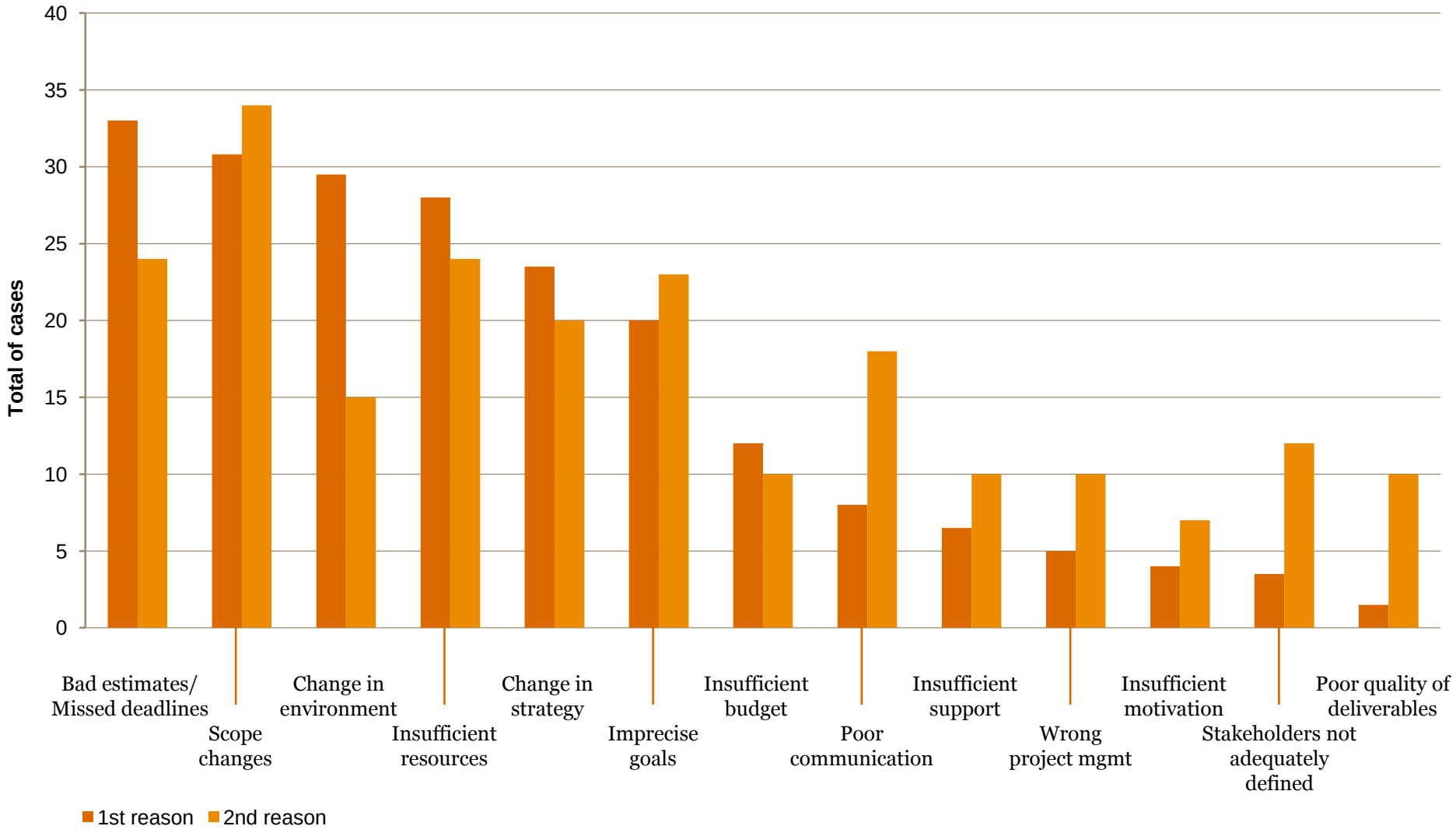
ERP projects that don't meet the expectations of senior management

Projects which don't meet **all** criteria for success

Statistical chances of an $10m+ ERP project not coming in on time **and** on budget

Projects that go live, but lose up to one quarter of planned benefits

Reasons Projects Fail



From PwC Survey "Boosting Business Performance through Program and Project Management"

Historical Perspectives: Impact of Projects on the Control Environment

"Seven Sins" of Implementations

"Seven Sins" of Implementations

1. Automated Controls
2. Locking Down of "Bypass" Controls
3. System Generated Reports
4. Data Conversion / Interfaces
5. User Access
6. Standard and Company Defined Super-user Accounts
7. Organizational Change Management

1. Automated Controls

Common Observations:

1. SOX documentation identifies minimal key automated controls
2. No inherent controls recognized in the documentation.
3. Failure to recognize that implementation carries a new controls landscape

Questions to Consider:

1. Have internal controls (business and IT) over financial reporting been contemplated and incorporated in the process design?
2. Have end users been adequately trained on how to perform their job and execute controls upon go-live?
3. Is there potential to leverage automated controls to reduce manual controls?

2. "*B*ypass*" Controls

Common Observations:

Automated controls may be bypassed; the most common ways are:

- 1. Configuration not finalized:
  - *Linking of purchase requisitions to POs*
  - *Workflow did not include all transaction types.*
- Redundant system functionality not locked down.

Questions to Consider:

1. How were controls and bypass documented during the design phase?
2. What was the overall UAT approach?
3. Are users leveraging the roles they will have in production during the UAT testing?

**Bypass is where a key system control can be compromised*

3. System Generated Reports

Common Observations:

1. Not all key custom or standard reports used are identified in SOX documentation.
2. System goes live when key reports are not available.
3. Difficulty in obtaining results of report testing.
4. Lack of adherence to documentation standards.

Questions to Consider:

1. How can you confirm that reports are complete & accurate?
2. Can you identify your “Key” report inventory early?
3. Can you leverage UAT of reports for Audit purposes?

4. Data Conversion/Interfaces

Common Observations:

1. No high level diagram showing interaction between new system and other systems.
2. Lack of documentation of Functional / Technical Design Specifications.
3. Test plans and results are not well documented / are not comprehensive.
4. Interface reconciliation controls not consistently detailed in documentation.
5. Interfaces are not stress tested / cannot handle the volume of traffic in the production environment (including errors with legacy systems).

Questions to Consider:

1. What data is being converted?
2. How is it being converted?
3. How much is being converted?
4. How are data transmissions complete and accurate?

5. User Access

Common Observations:

1. A different security design implemented than that which was originally outlined.
2. Segregation of Duty conflicts in underlying profiles / roles which are used to build user access rights.
3. Insufficient time for handover by integrator / insufficiently trained client staff on security administration.

Questions to Consider:

1. What was the approach for designing responsibilities?
2. How did you ensure appropriate segregation of duties prior to go-live?
3. Is the system administration team reduced upon go-live?
4. Have consultants with sensitive access been removed from the system?

6. *Super* Users

Common Observations:

1. Project members having access to live environment to provide “hypercare” or support rollout of new sites / functionality.
2. Project profiles not well defined and allocated to too many users.
3. IT department having access to functional modules through widely defined profiles.
4. Super-User accounts not sufficiently restricted and monitored.

Questions to Consider:

1. What was the approach for designing responsibilities?
2. How did you ensure appropriate segregation of duties prior to go-live?
3. Is the system administration team reduced upon go-live?
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7. Organizational Change Management

Common Observations:

1. Users not clear on how to operate the system.
2. Users still being trained after implementation.
3. Access rights not set-up or not all required users set up.
4. Large increase in number calls to the help desk in after go-live; themes are: a) Access issues; b) Training; c) Workflow; and d) Use of system
5. System Integrator does not properly "hand-over" knowledge and experience to the personnel responsible for operating the system in the production environment.

Questions to Consider:

1. Are processes appropriately designed to meet the business requirements:
   - Approval of functional design documents.
   - Approval of configuration design documents.
   - Technical design documents meet those requirements.
2. Are there change control processes that manage business requirement and design updates.

Taking Action: Stakeholders & Risk

Project Stakeholder Interests

Stakeholder	Typical Concerns	Potential Value Proposition
Audit Committee	• Delivery of anticipated benefits • Accuracy of status reporting and oversight • Impact on existing internal control environment	Benefits realization, regulatory and control impacts, status validation
Project Sponsor	• Delivery of anticipated benefits • Communication with various stakeholders • Organizational readiness	Benefits realization, organizational readiness, expected outcomes assessment
Project Manager	• Project governance model • Issue communication and resolution • PMO effectiveness	Project governance model, issues escalation, PMO procedures, end user expectations
Function Lead or End User	• Readiness of the user community • Efficiency/Effectiveness of the solution • Issue communication and resolution	Controls assessments, organizational readiness, issue escalation
Internal Audit	• Knowledge transfer • Impact on existing financial, operational and regulatory controls	Training and knowledge transfer, controls assessments
External Audit	• Tone at the top and company level controls • Impact on financial controls • Data conversion and program development	Financial controls assessment, control environment, program development processes, data conversion (pre-imp)

Risk Considerations

Business Risk:

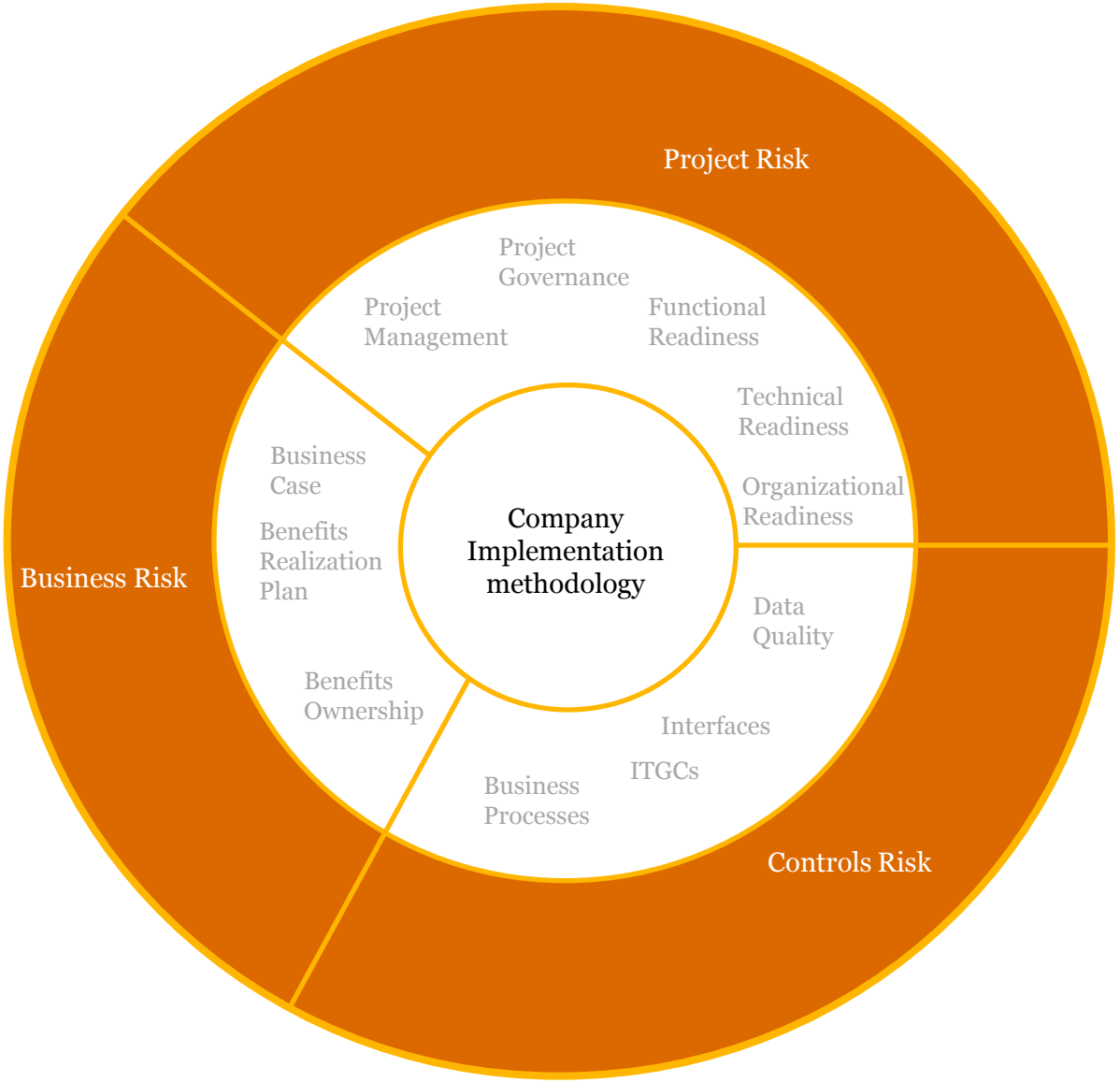
Have expected business benefits been clearly defined and communicated?

Project Risk:

Will the solution be delivered on time, on budget, and to specifications?

Controls Risk:

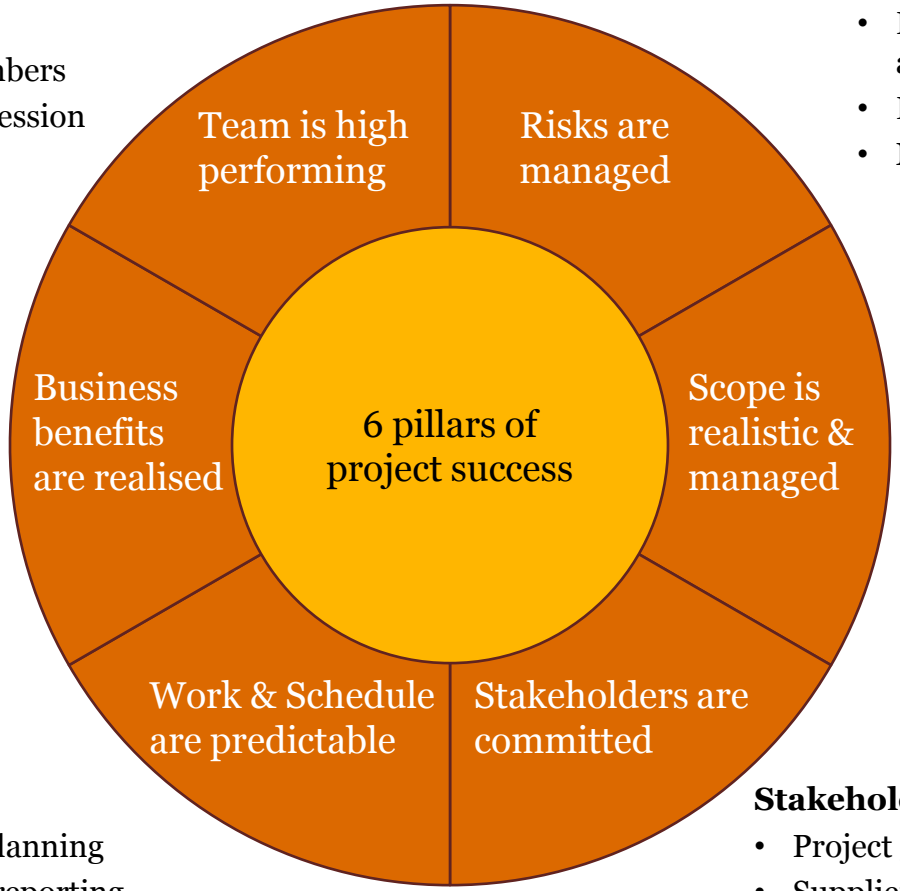
Will the design and implementation of controls satisfy financial reporting, operational and regulatory requirements in an efficient and effective manner?



Project & Business Risks:
Driving Constructive & Forward Looking Conversations

Team risk
- Project organisation
- Resourcing skills and numbers
- Team mobilisation & succession

Risk management process
- Risk identification, management and escalation procedures
- Documentation and audit trails
- Monitoring and reporting



Benefits risk
- Business case and ownership
- Measurement, baseline and KPIs
- Cost tracking
- Benefits tracking and reporting

Scope risk
- Clear & agreed scope
- Scope change control
- Dependency management
- Implementation timing

Schedule risk
- Project and workstream planning
- Progress monitoring and reporting
- Project control processes
- Quality assurance process

Stakeholder risk
- Project governance & stakeholder buy-in
- Supplier management
- Communication – internal and external
- Organisational change management

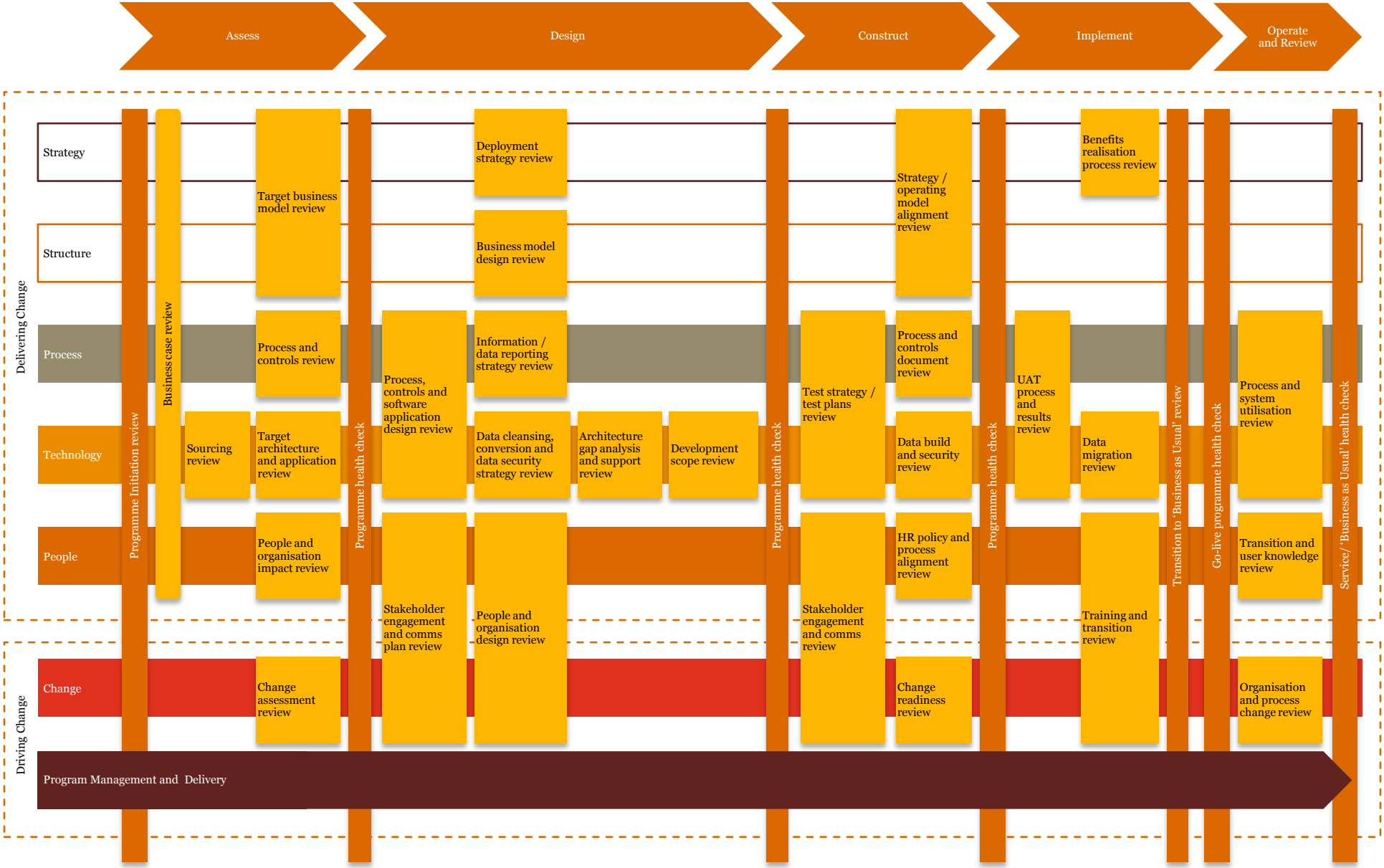
Project Lifecycle

Project Outcomes - Environment

Project Governance
Project Management Processes

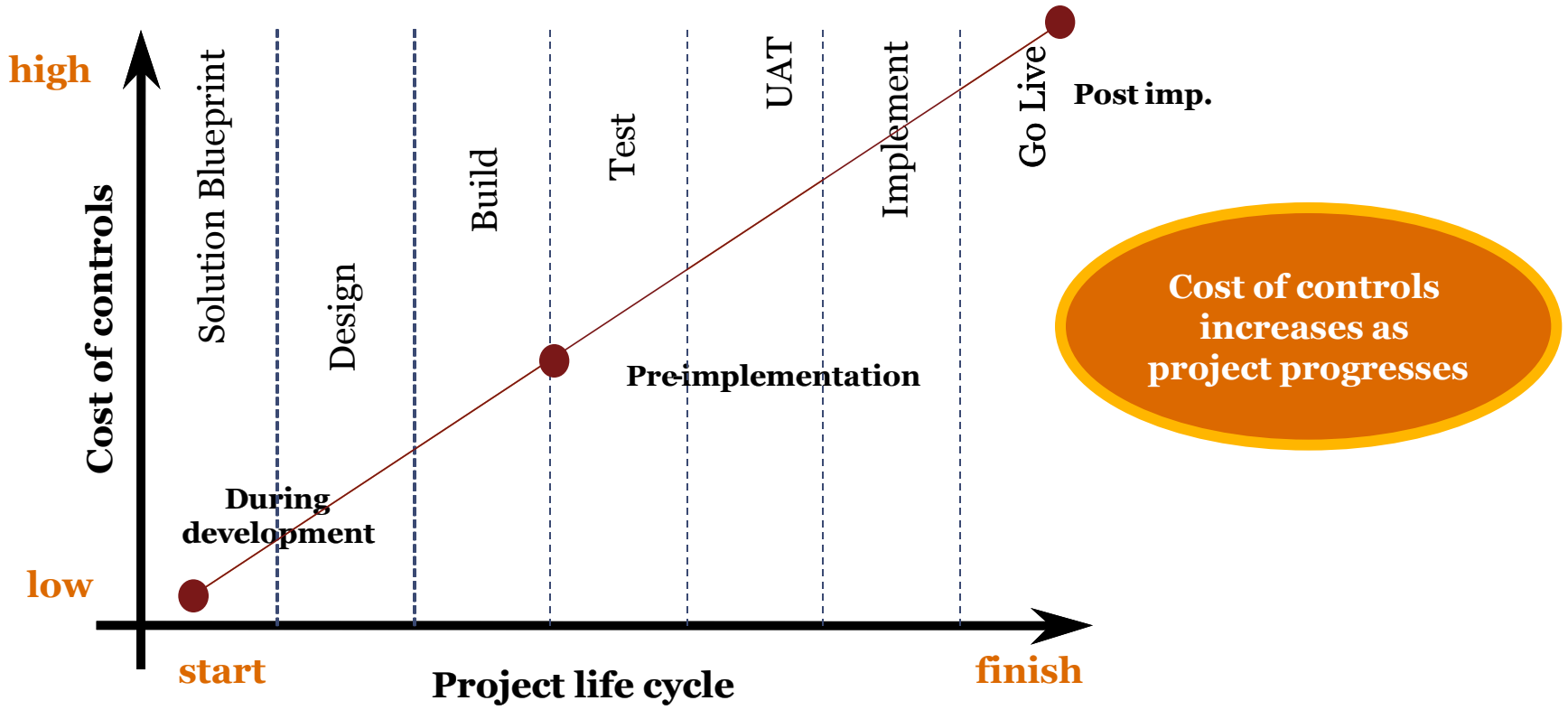
Project Outcomes - Lifecycle	**Define**	**Design**	**Build & Test**	**Deliver**	**Implementation Support**	**Maintain**
Functional Readiness	Business Requirements	Process Design	Unit/Integration Testing	Process Cutover	Process Validation/ Workaround Updates	Process Maintenance
Technical Readiness	Technical Requirements	Software/Hardware Design	Performance Testing	Hardware Cutover	Performance Refinement	Technical Upgrades/ Maintenance
Organization Readiness	Organization Change Assessment	Organization Design	User Acceptance Testing (UAT) & Training	Training Deployment	User Support	Ongoing User Support and Training
Testing Considerations	Test Strategy	Test Plans	Test Scripts and Resutls	User Validation		
Implementation Considerations		Implementation Requirements	Cutover Plan	Cutover Results		
Controls Outcomes						
Business Processes	Business Process Control Requirements	Business Process Control Design	Control Testing	Control Migration	Transition Support/ Workarounds	Process Monitoring and Maintenance
IT General Controls	ITGC Control Requirements	ITGC Control Design	Test/QA Environments	Production Environment	Temporary IT Transition Support	IT Monitoring and Maintenance
Data Quality	Data Requirements	Data Mapping	Data Conversion Test	Data Conversion Validation	Data Transition Support	Data Monitoring & Maintenance
Interfaces	Interface Requirements	Interface Design	Interface Testing	Interface Validation	Interface Transition Support	Interface Monitoring & Maintenance
Business Outcomes						
Business Case	Approved Business Case	Business Case Validation - Design	Business Case Validation – Build	Business Case Validation - Migrate		
Benefits Realization	Metrics Consideration	Metrics Defined	Metrics Validation	Metrics Mgt Processes Implemented	Collect Preliminary Metrics	Continuous Metrics Monitoring
Benefits Ownership	Owners Defined	Owners Committed	Owners Trained	Metrics Validated	Owners Accountable	Owners Accountable

Audit & Assurance Alternatives



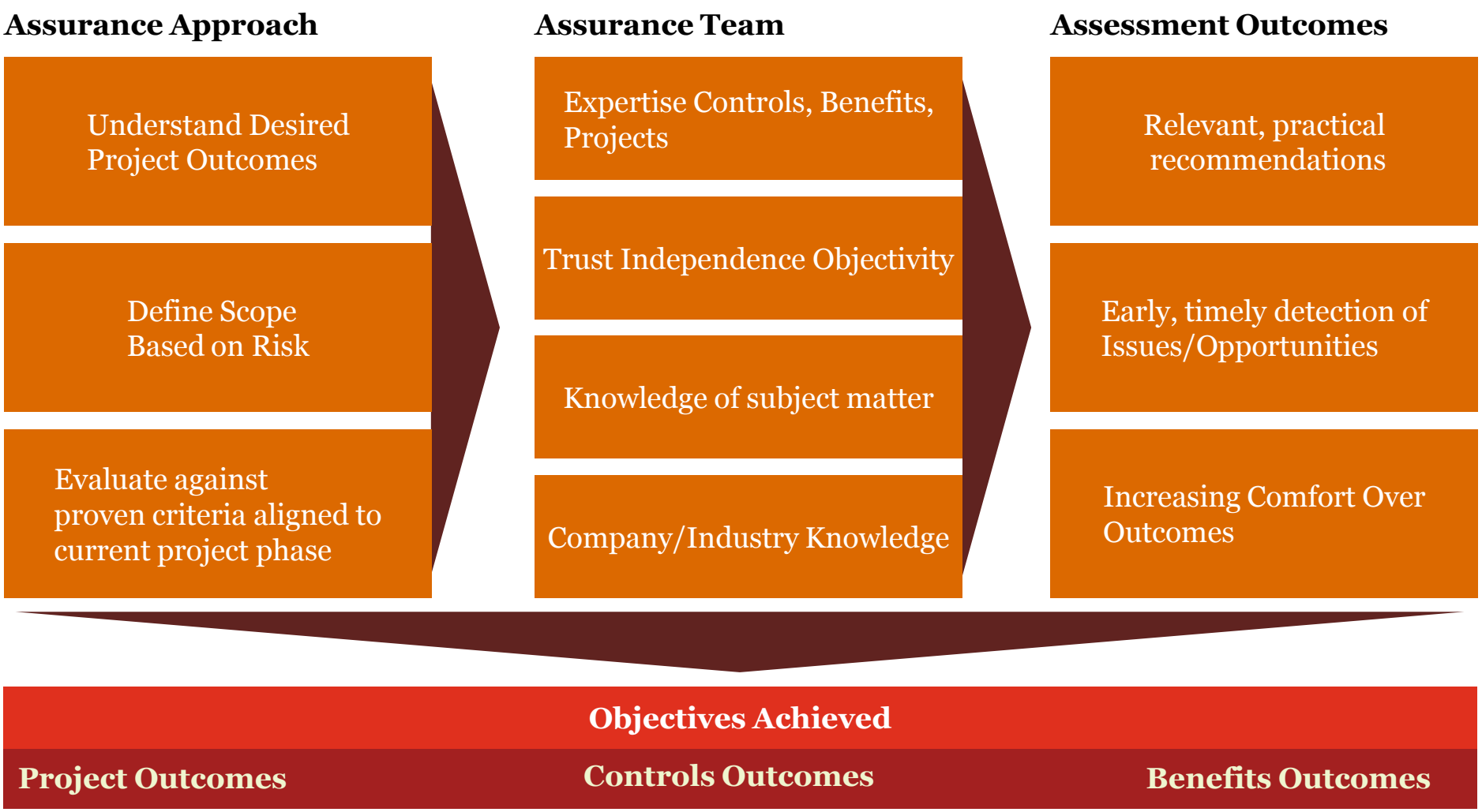
Early & Continuous Focus on Controls

The design of internal controls (configurable, manual, and access/security) during business process design, rather than identifying and correcting control weaknesses after the process and systems are installed, provides the greatest value in terms of process, system, and data integrity, at the lowest cost.



Project Delivery:
Critical Success Factors

Sample Project Assurance Approach



Key Execution Considerations – Timing

Appropriate timing of project assurance reviews will depend on project risks, current state of the project and the project assurance team's agreed role on the project.

Type of Review – Timing	Pros	Cons
Point in-time risk assessment - Single, review of the project focused on highlighting key risk areas	• Lowest cost/effort	• Substantial time required to ramp-up • Can be challenging to provide timely feedback
Periodic 'checkpoint' – Deep dive reviews conducted at key project milestones. Often aligned to gate reviews	• Objective is to provide key input at relevant project decision points	• Still requires substantial ramp-up time at start of each review • Difficult to provide timely feedback
Continuous Monitoring – Continuous engagement in the project through dedicated project assurance resources	• No ramp-up time • Timely feedback • Continuity of resources	• Can be substantial effort (depending on extent of CM provided
Hybrid – Combination of Continuous monitoring and checkpoint reviews	• Effort adjusted to meet org needs • Limited ramp up time	• Higher cost than checkpoint review

Key Execution Considerations– Extent of Review

Extent of project assurance reviews (breadth and depth) should be driven by results of the preliminary scoping assessment, discussions with key stakeholders and/or results of the risk assessment. Depending on risks, reviews may be structured as top-down process reviews – focused on key governance, management and SDLC processes, deep dive quality reviews of specific project deliverables or a combination of the two.

Type of Review – Extent	Pros	Cons
Process Review – Top-Down	• Less time consuming • Can quickly identify pervasive issues	• Less detailed review of all project areas
Detailed Process Audits	• Additional input on adherence to processes	• Greater investment of time
Detailed product audits (QA) – Bottoms-Up	• Focused reviews over key deliverables • Insights into quality of deliverables and adherence to standards	• May not flag pervasive issues • Can be challenging to identify appropriate subject matter specialists – may require additional lead time to schedule
Hybrid	• Opportunity to identify pervasive issues and focus detailed product reviews on critical or high risk items	• More costly than top-down only review or focused product audits

Top 10 Keys to success

Key events that may contribute to a successful Project Assurance engagement:

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

Questions?

For more information, please contact:

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