Adding Strategic Value with Project Assurance
Welcome and Introduction
Vicki Wagoner
Internal Audit Services
Today’s Agenda

Becoming Relevant

Historical Perspectives

Taking Action

Project Delivery
Becoming Relevant: Stakeholders’ Perspective on 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

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<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tr>
<td>Strategic &amp; Business</td>
<td>60%</td>
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<tr>
<td>Operational</td>
<td>20%</td>
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<tr>
<td>Compliance</td>
<td>5%</td>
</tr>
<tr>
<td>Financial</td>
<td>15%</td>
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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: 20%+
- ERP implementations viewed as business failures: 51%
- ERP projects that don’t meet the expectations of senior management: 71%
- Projects which don’t meet all criteria for success: 84%
- Statistical chances of an $10m+ ERP project not coming in on time and on budget: 100%
- Projects that go live, but lose up to one quarter of planned benefits: 86%
**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
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. “Bypass*” 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.
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?
4. Have consultants with sensitive access been removed from the system?
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

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

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

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

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

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

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

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

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**6 pillars of project success**

- Team is high performing
- Risks are managed
- Scope is realistic & managed
- Business benefits are realised
- Work & Schedule are predictable
- Stakeholders are committed
# Project Lifecycle

## Project Outcomes - Environment

<table>
<thead>
<tr>
<th>Project Management Processes</th>
<th>Define</th>
<th>Design</th>
<th>Build &amp; Test</th>
<th>Deliver</th>
<th>Implementation Support</th>
<th>Maintain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Readiness</td>
<td>Technical Requirements</td>
<td>Software/Hardware Design</td>
<td>Performance Testing</td>
<td>Hardware Cutover</td>
<td>Performance Refinement</td>
<td>Technical Upgrades/ Maintenance</td>
</tr>
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## Testing Considerations

- Test Strategy
- Test Plans
- Test Scripts and Results
- User Validation
- Cutover Plan
- Cutover Results

## Implementation Considerations

- Implementation Requirements

## 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
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.

Cost of controls increases as project progresses
Project Delivery: Critical Success Factors
Sample Project Assurance Approach

Assurance Approach

Understand Desired Project Outcomes

Define Scope Based on Risk

Evaluate against proven criteria aligned to current project phase

Assurance Team

Expertise Controls, Benefits, Projects

Trust Independence Objectivity

Knowledge of subject matter

Company/Industry Knowledge

Assessment Outcomes

Relevant, practical recommendations

Early, timely detection of Issues/Opportunities

Increasing Comfort Over Outcomes

Objectives Achieved

Project Outcomes

Controls Outcomes

Benefits Outcomes
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.

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

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<thead>
<tr>
<th>Type of Review – Extent</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| 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:

<table>
<thead>
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