

Proactively Managing ERP Risks

January 7, 2010



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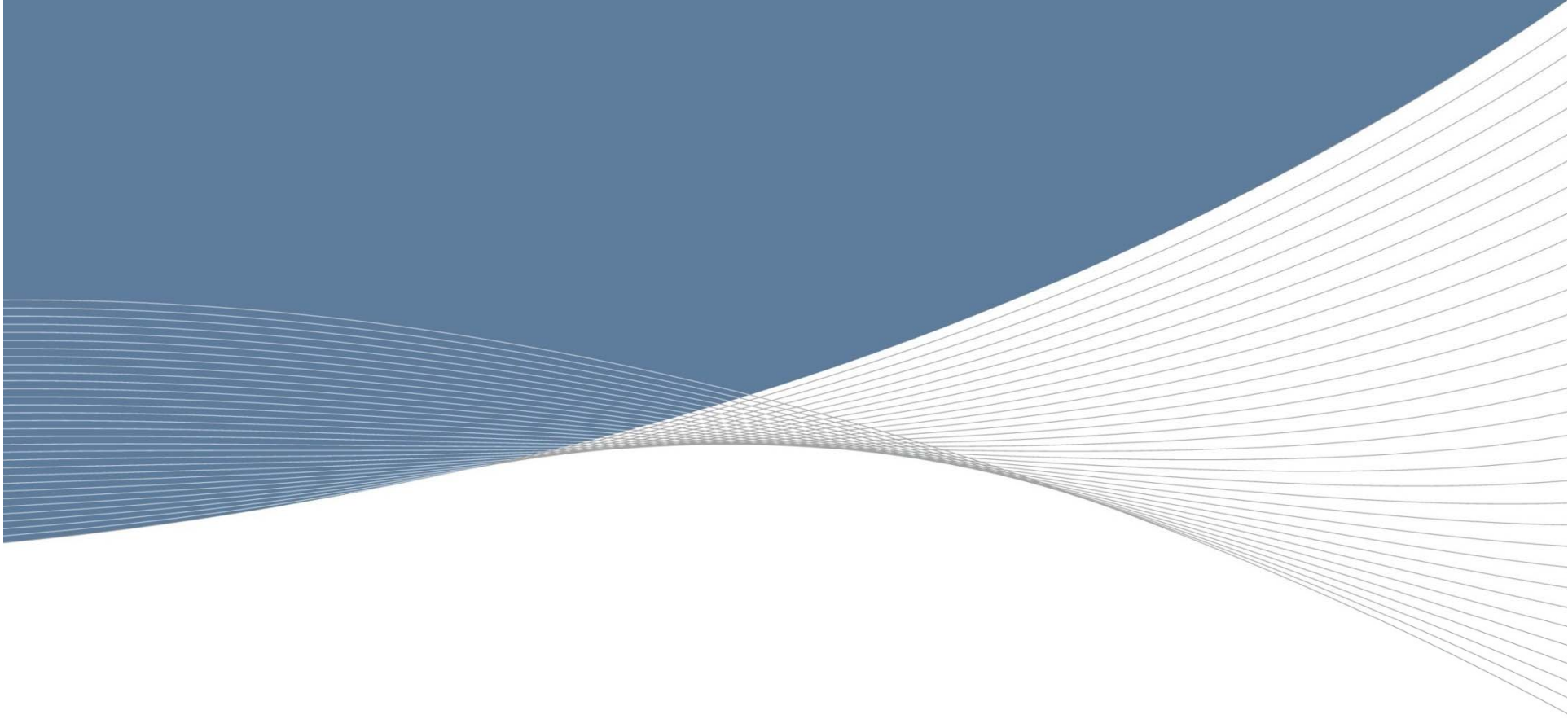
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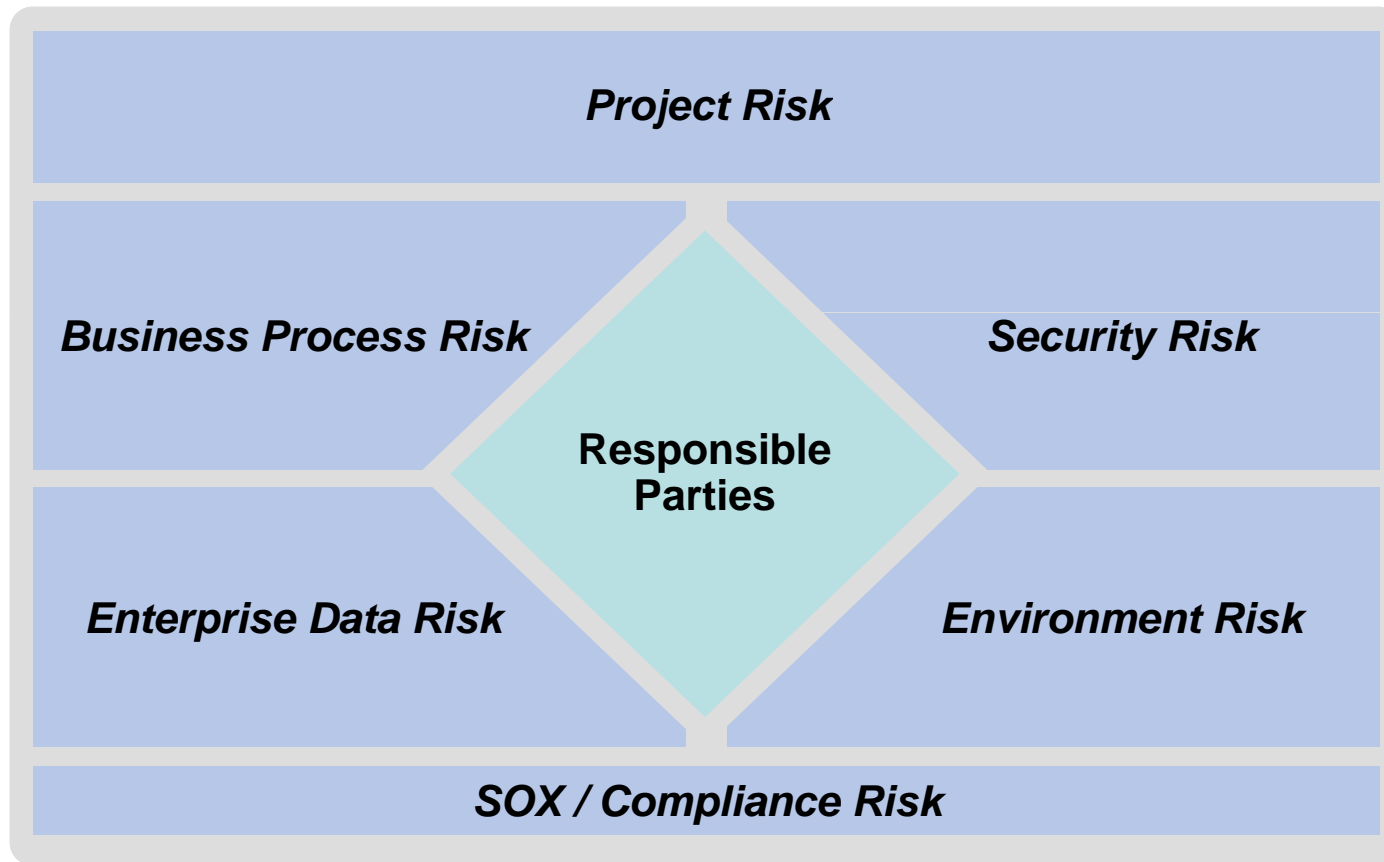
Introductions and Objectives

- Establish a structured model to demonstrate the variety of risks associated with an ERP environment
- Discuss control areas that can help manage these risks and understand how to proactively ensure they're utilized
- Share ideas for increasing value through effective control deployment strategies

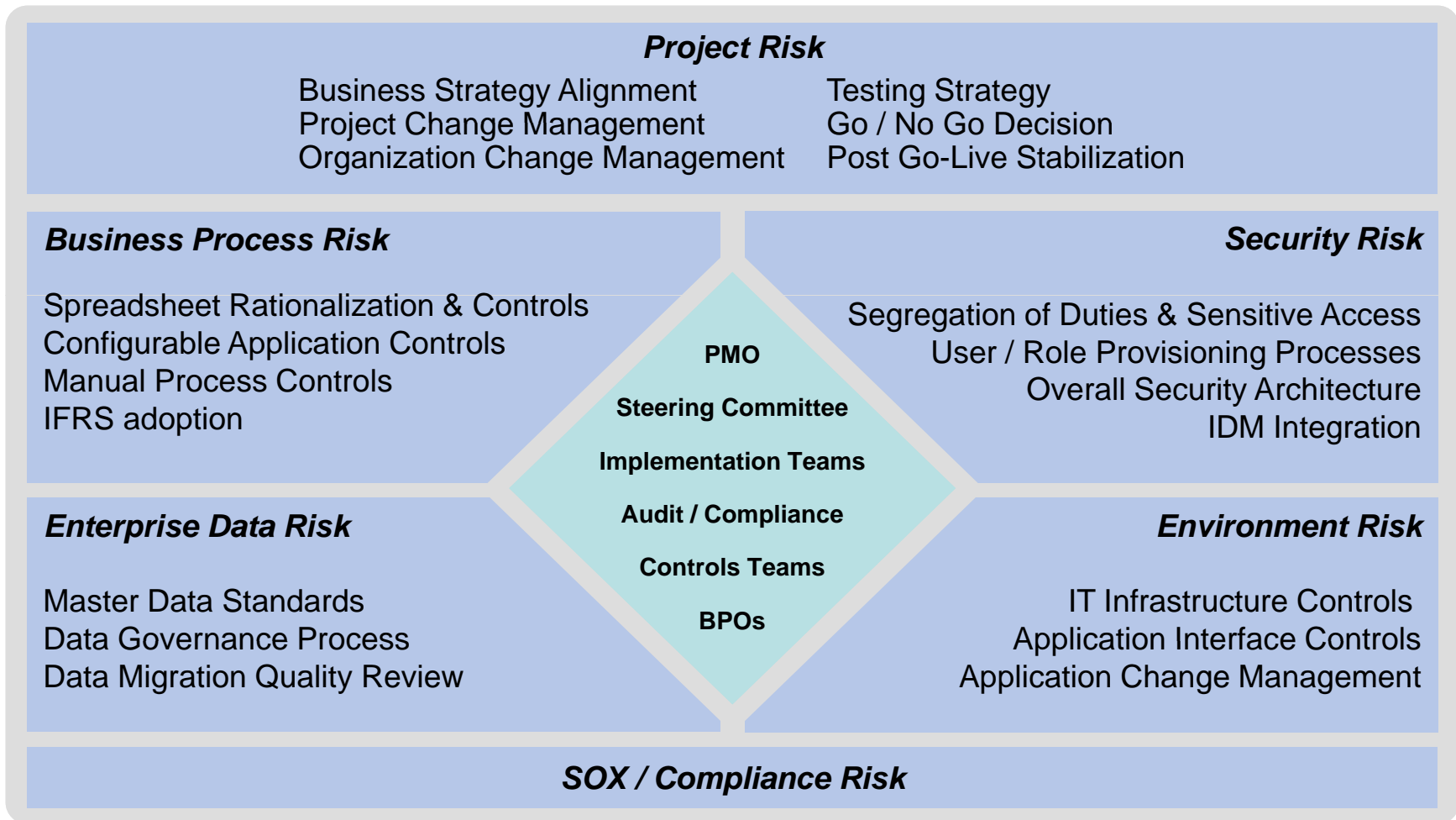
Defining the Risk Universe



ERP Risk Universe

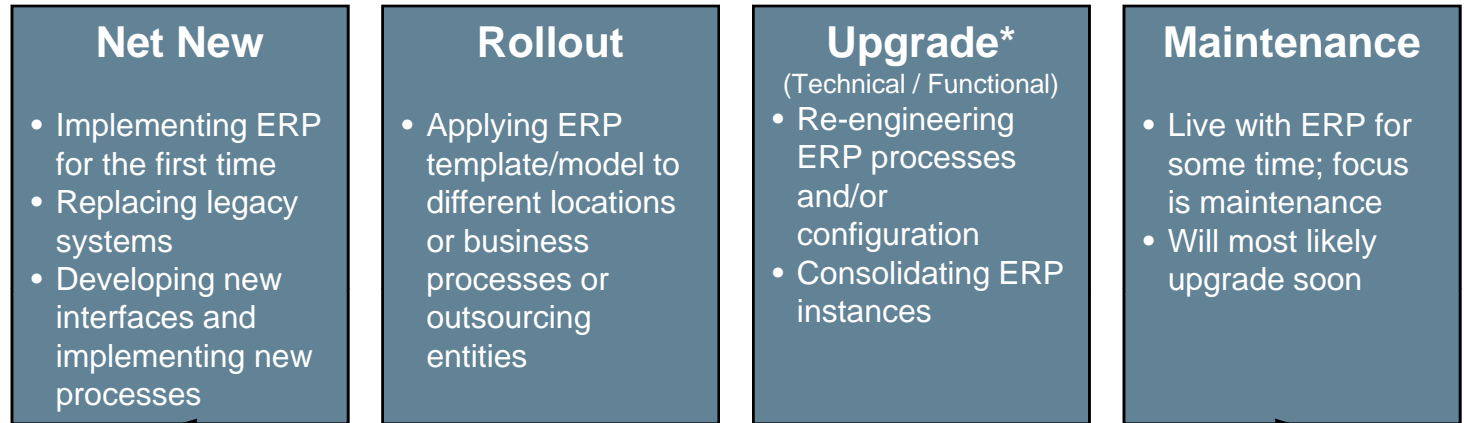


ERP Risk Universe

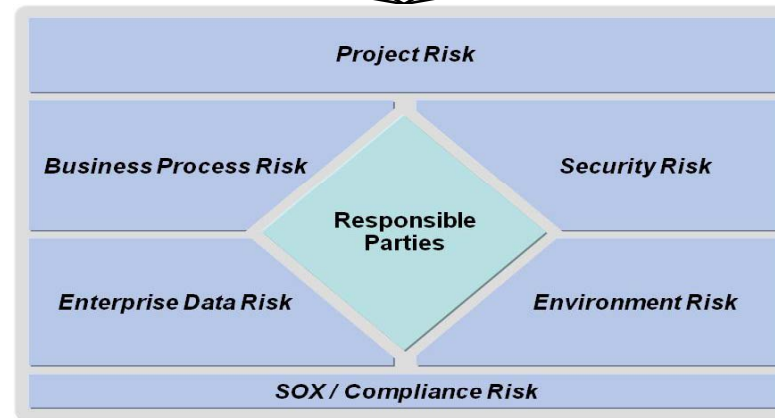


ERP Risks and Implementation Stages

Where are you now? →



Each of the above project stages introduces risks →



Project Risk



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What Are Your Odds for Success in Difficult Implementations and Transformational Initiatives?

1 Success is Rare ...

LATE - 93% took longer than expected / 68% took “much longer”

OVER BUDGET - 65% were over budget – 17% were >15% over – 16% were 50% or more over

MISSED BENEFITS - Only 21% realized 50% of the benefits

IMPAIRED THE BUSINESS - 57% experienced major operational disruptions

Panorama Consulting Group – “2008 ERP Report”

2 ... and Your Odds Don't Improve ...

Inexperience Yields Optimism – Seasoned veterans know what can go wrong will

Failures in Project Management – Leadership falls victim to being in the fray vs. seeing it clearly

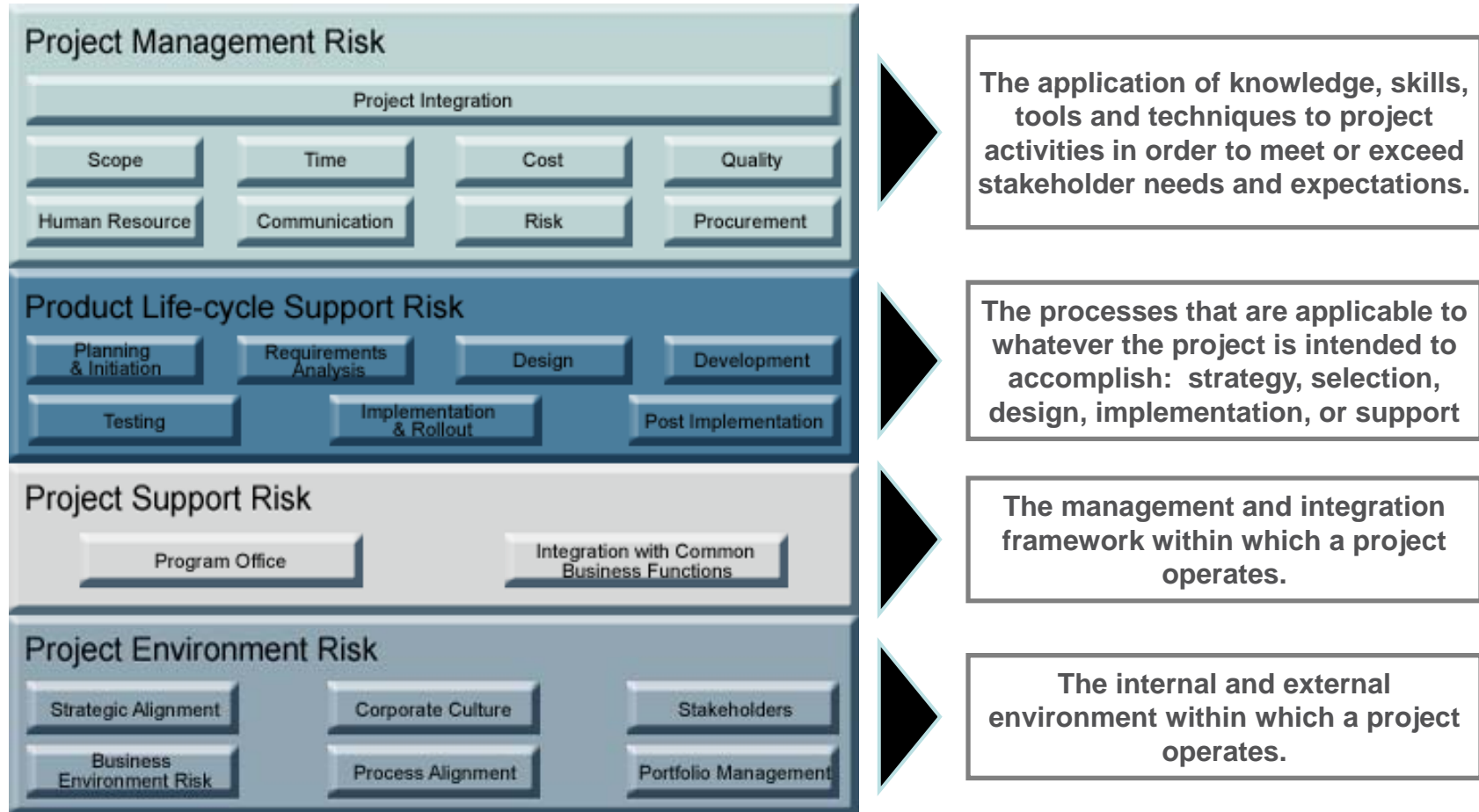
Resistance to Change – Org. change mgmt. makes technical work look easy

Loose Governance – With this much at risk, these initiatives require special structures and processes

Strategic and Tactical Misalignment – Challenged to meet the budget and schedule vs. the business case

Conflicts of Interest – Every player in the initiative has a “dog in the hunt”

Sample Evaluation Framework



Sample Framework Areas & Categories

Initial and ongoing project risk assessments that consider key control areas across the strategic initiative form the foundations for conclusions and recommendations.

Project Management	Risk Rating	Status Change	Risk Categories
A. Project Office		o	8
B. Scope		+	5
C. Time		o	5
D. Cost		o	4
E. Quality		o	3
F. Human Resource		o	3
G. Communication		-	3
H. Risk		o	4
I. Procurement		o	6

Project Life Cycle Support	Risk Rating	Status Change	Risk Categories
J. Planning and Initiation		o	6
K. Current State Assessment		o	4
L. Requirements Definition		+	7
M. Solution Selection		+	8
N. Implementation Planning		+	8
O. Business Case To Proceed	Not Started	+	7

Project Support	Risk Rating	Status Change	Risk Categories
P. Program Office		o	5
Q. Integration with Common Business Functions		o	5

Project Environment	Risk Rating	Status Change	Risk Categories
R. Strategic Alignment		o	3
S. Corporate Culture		o	4
T. Stakeholders		-	4
U. Business Environment Risk		o	11
V. Process Alignment		+	4
W. Portfolio Management		o	4

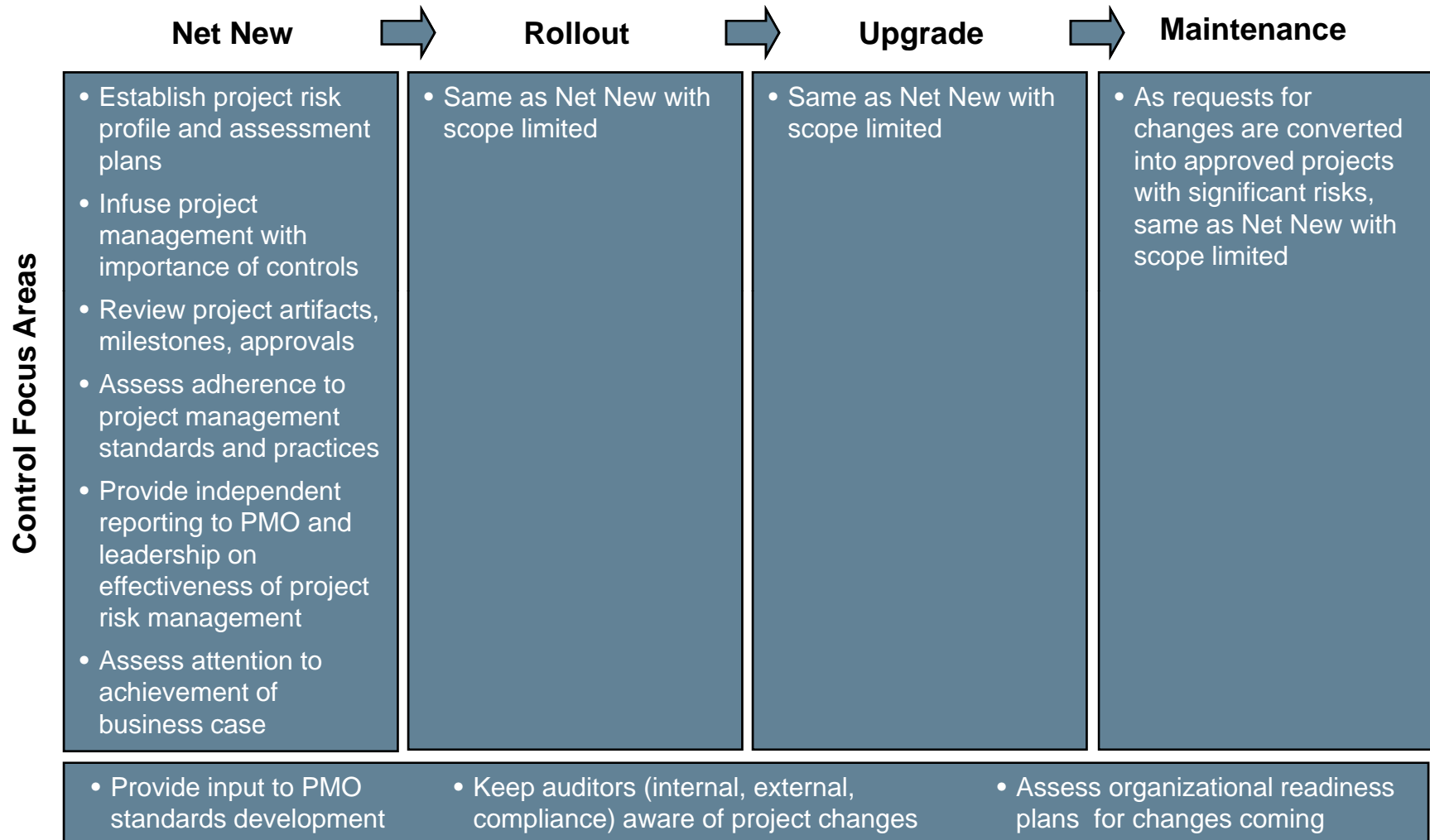
Key:

- + Risk has increased since prior review
- Risk has decreased since prior review
- o Risk unchanged since prior review

Risk Status

1	Unlikely to occur and low impact of risk occurring.	<p>RISK STATUS</p>
2	Unlikely to occur and moderate impact or risk occurring.	
3	Possible chance and/or moderate impact of risk occurring.	
4	Possible chance and/r significant impact of risk occurring.	
5	Likely chance and/or significant impact of risk occurring.	

Addressing Project Risk



Business Process Risk



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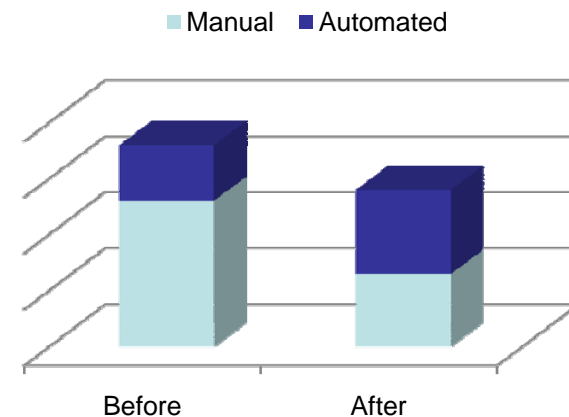
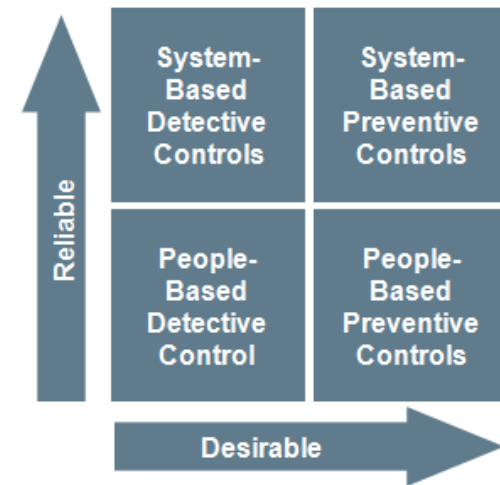
Controlling Business Process Risk

Control Options

- Application (Configurable) Controls – e.g. field edits, workflow, data validations, default values, tolerances, account mappings, and error messages
- Manual Controls – e.g. policies and procedures, reviews and approvals, reconciliations, and management reporting

Investing in appropriate design and implementation of automated controls provides multiple benefits, including:

- Improved reliability
 - reduced “human error” factor
 - consistent performance
 - improved auditor reliance
- Less costly to perform
 - reduced man-hours
 - less re-work for issues discovered downstream
- Significantly less costly to test
 - test of one vs. transaction testing
 - reduced need for periodic confirmation
 - increased ability to test with automated tool(s)

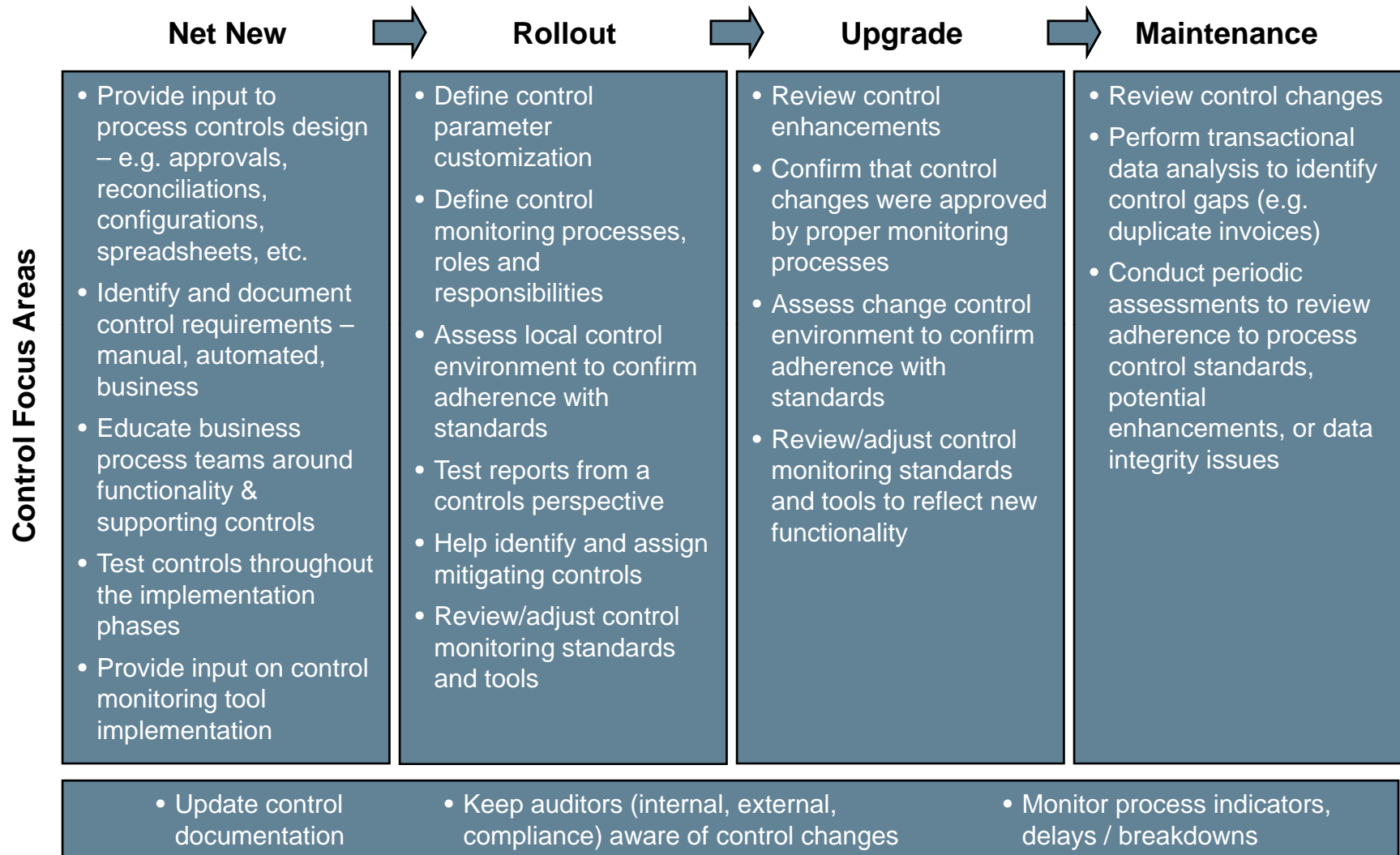


Spreadsheet Control Considerations

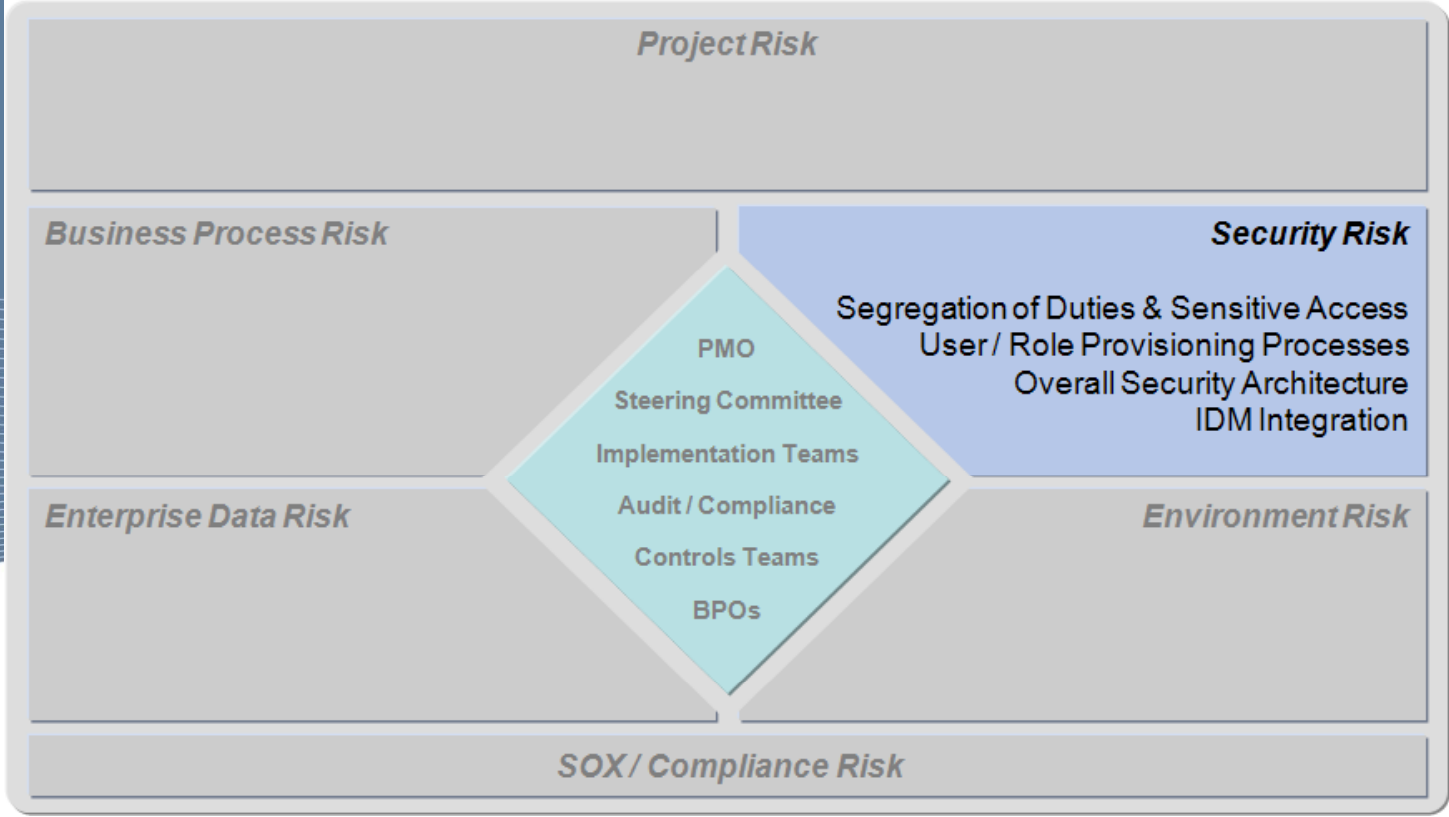
Ref	Control
1	All “critical” end user applications are maintained in a current and accurate inventory. Define scoping criteria for spreadsheets that support Statutory Financial Reporting and/risk-rank spreadsheets. Focus on key controls for the end-to-end process , not just spreadsheet controls. Consider broadening scope to address operational risk i.e. non-financial reporting spreadsheets. Use of software is emerging as a leading practice.
2	Spreadsheets are subject to a logic inspection to baseline functionality . Identified errors and significant design issues are remediated. Use of software to facilitate logic inspection is a leading practice. Focus on design and formula logic & consistency.
3	File naming conventions and storage locations are implemented to enforce version control .
4	Input controls are in place to ensure complete, accurate and valid data input. Programmed control totals and data validation are leading practice.
5	Changes are recorded in a centralized log and are subject to review to ensure they function as intended. Changes to high risk/highly complex spreadsheets should be subject to testing/validation .
6	Access to spreadsheet files is restricted based on job roles and to enforce segregation of duties. Further restriction and password controls at the file, sheet and cell level is leading practice. Use of document management and spreadsheet management solutions is emerging as leading practice.
7	Spreadsheets are subject to periodic backup to ensure recoverability.
8	Critical spreadsheets are supported by current and accurate documentation . Documentation should include purpose of spreadsheet, instructions for use, key assumptions, authorized users, logic for key calculations, description of VBA, inputs/external links and key outputs. Good practice is to include documentation as part of the spreadsheet or in a document management/spreadsheet management solution. Good documentation will significantly reduce the risks associated with staff turnover/insufficient succession planning.

Any approach should be **risk-based** and not all controls may be required for each spreadsheet.

Addressing Business Process Risk



Security Risk



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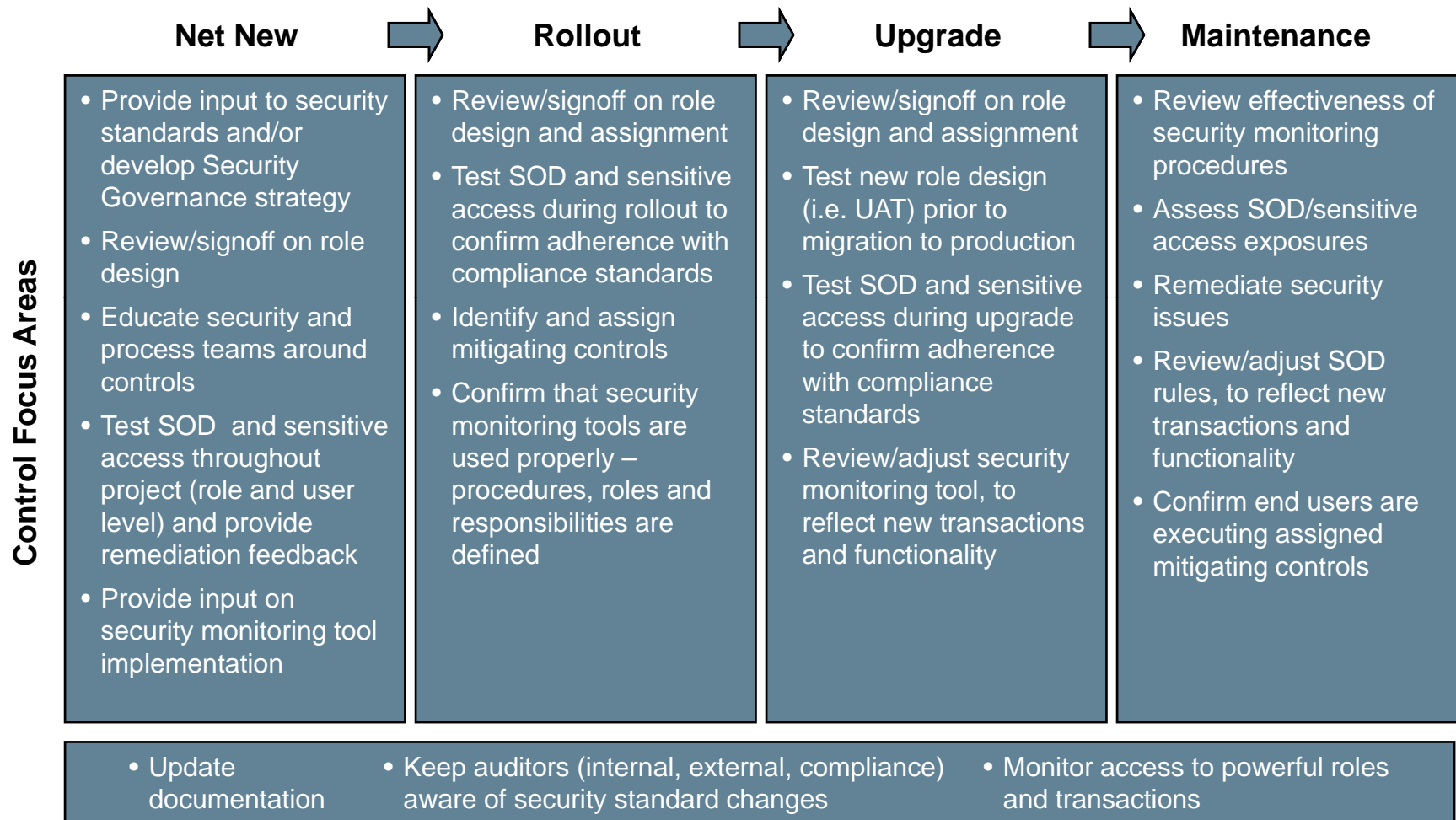
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Controlling Security Risk

- Security Administration
 - Provisioning user IDs
 - Documented approvals
 - Password parameters
 - Monitoring security reports and audit logs
- Segregation of duties
 - Separation of incompatible functions
 - Monitoring access levels
- Sensitive access & privacy
 - Limiting access based on business need
 - Controlling powerful authorities
 - Limiting access to comply with privacy regulations (e.g. PCI, HIPAA)
- Technologies and tools



Addressing Security Risk



Enterprise Data Risk



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Controlling Enterprise Data Risks

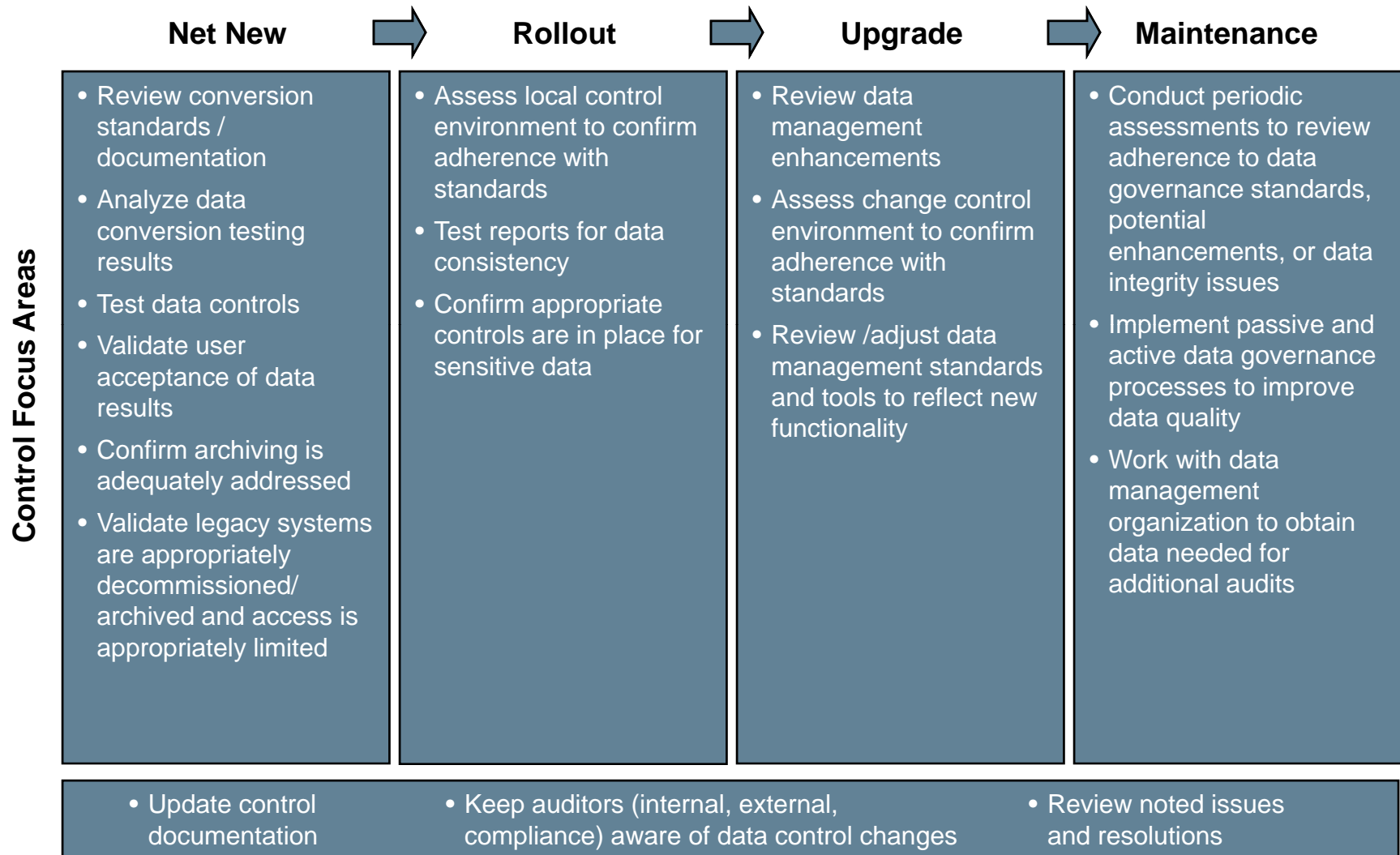
- Data Migration
 - Data Conversion
 - data mappings
 - conversion design
 - conversion testing
 - reconciliations
 - Data Cleansing
 - inactive data
 - duplicative data
 - erroneous data
 - “business relevant” data
 - Technologies and tools
- Data Governance
 - Master Data Maintenance
 - data ownership
 - data standards
 - policies and procedures
 - impact analysis
 - Data Archiving
 - performance and storage requirements
 - data access requirements
 - data redundancy
 - Technologies and tools



Sample Benefits of Strong Data Governance

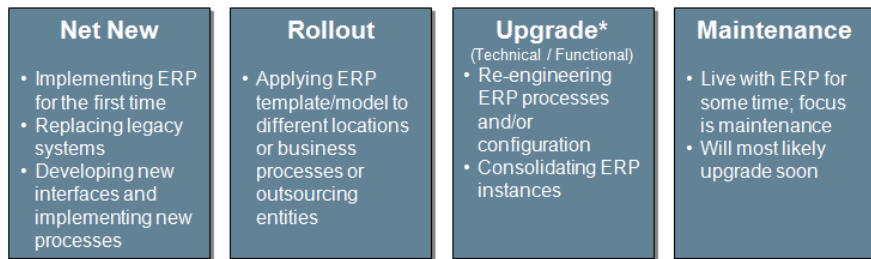
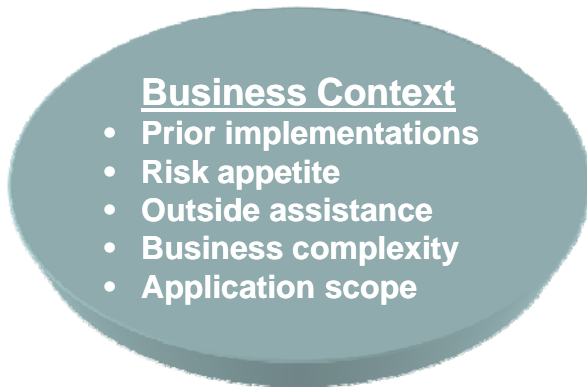
- a. Streamlined future data conversions and implementation of reporting capabilities
- b. Improved reporting accuracy and data reliability for ongoing strategic and operational management decisions
- c. Efficiencies gained from use of “single book of record”
- d. Improved visibility into revenue and cost drivers for management review and decisions
- e. Improved capabilities to leverage information for vendor / customer negotiations and risk management
- f. Reduction in ongoing master data maintenance efforts
- g. Improved litigation readiness (e-Discovery)
- h. Improved ability to identify, retrieve, use, preserve, and purge electronic information
- i. Alignment of enterprise information management with security, legal, compliance, audit, operations, and training
- j. Improved sustainability of SOX and operational compliance
- k. Increased ability to perform high-value audits

Addressing Enterprise Data Risk

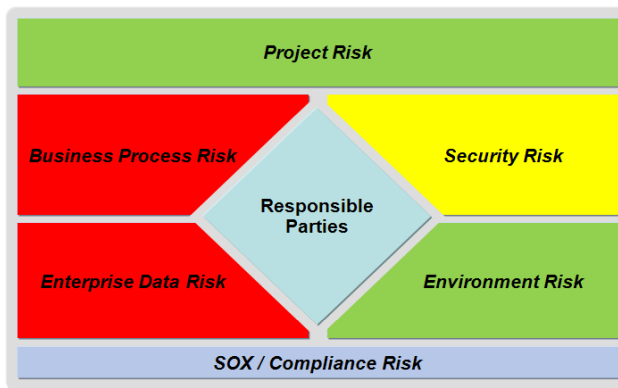


Summary

Planning for ERP Risk Management



- Assess your risk
- Determine IA role
- Identify resources
- Develop plan
- Participate in GRC tool selection and deployment
- Execute plan and monitor progress





Summary

- Understand implementation and project plans
- Get involved in early stages of projects by providing input from a risk and compliance perspective
- Ensure proper control 'ownership' is defined and communicated within organization
- Bring the right skills – configuration, business, security, audit, data management, etc.
- Use tools – it is time consuming to properly assess these risks and controls manually
- Your goals when assessing and providing recommendations should include:
 - Standardize control design and achieve incremental value
 - Help find the right balance between automated and manual controls
 - Help address potential control gaps
 - Confirm that right people have authority to approve changes design changes impacting your control environment
 - Tools used by implementation or compliance teams are built the right way to test and monitor security exposures
 - Assess your environment periodically and with the right depth of analysis



Thank you for your attention.

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