

Inside the Secret Life of Application Controls

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Interaction!!!

- Let's have some fun
- Ask questions as they come
- Share stories, thoughts and ideas



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Agenda

- What's the secret?
- Definition, examples and benefits of application controls
- Who audits application controls?
- Role of the internal auditor
- Audit Skills
- Risk Assessment
- Scoping & auditing approaches
- Leveraging application controls
- Current trends
- Summary



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What's the Secret?

- **Part I** - When is the last time you heard or read about a breakdown of a company's application controls?
 - Headlines tend to be about serious security events
 - Denial of Service attacks
 - Virus outbreaks
 - Loss or theft of social security numbers, credit card numbers, health information, etc.
- **Part II** – Application controls tend to fall into somewhat of a gray area in terms of:
 - Who owns them?
 - Who audits them?
 - How are they used to decrease the total cost of governance?



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Definition of Application Controls

- IT controls specific to an application or system that supports a particular business process
 - Input data is accurate, complete, authorized and correct
 - Data is processed as intended in an acceptable time period
 - Output and stored data is accurate and complete
 - A record is maintained to track data processing from input to storage to output
- General computer controls
 - Apply to all organization-wide system components, processes and data
- Can be similarities between application controls and general computer controls
 - Accounts and passwords
 - System parameters and settings



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Application Control Examples

- A/P tolerance levels
- Automatic postings
- Hard vs soft errors
- Document number ranges
- Data integrity checks
- Workflow approvals
- Control accounts



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Benefits of Application Controls

- Cost effective and efficient means to manage risk
 - **Reliability**
 - Reduces likelihood of errors due to manual intervention
 - They don't take vacation, get sick, have a bad day or temporary forms of amnesia
 - **Benchmarking** – conclude application controls are effective year-to-year **IF**:
 - General computer controls are effective, **AND**
 - No changes have been applied to the application control programs
 - **Time and cost savings**
 - Total cost of ownership of an application control is around 50% to 75% less than a manual control



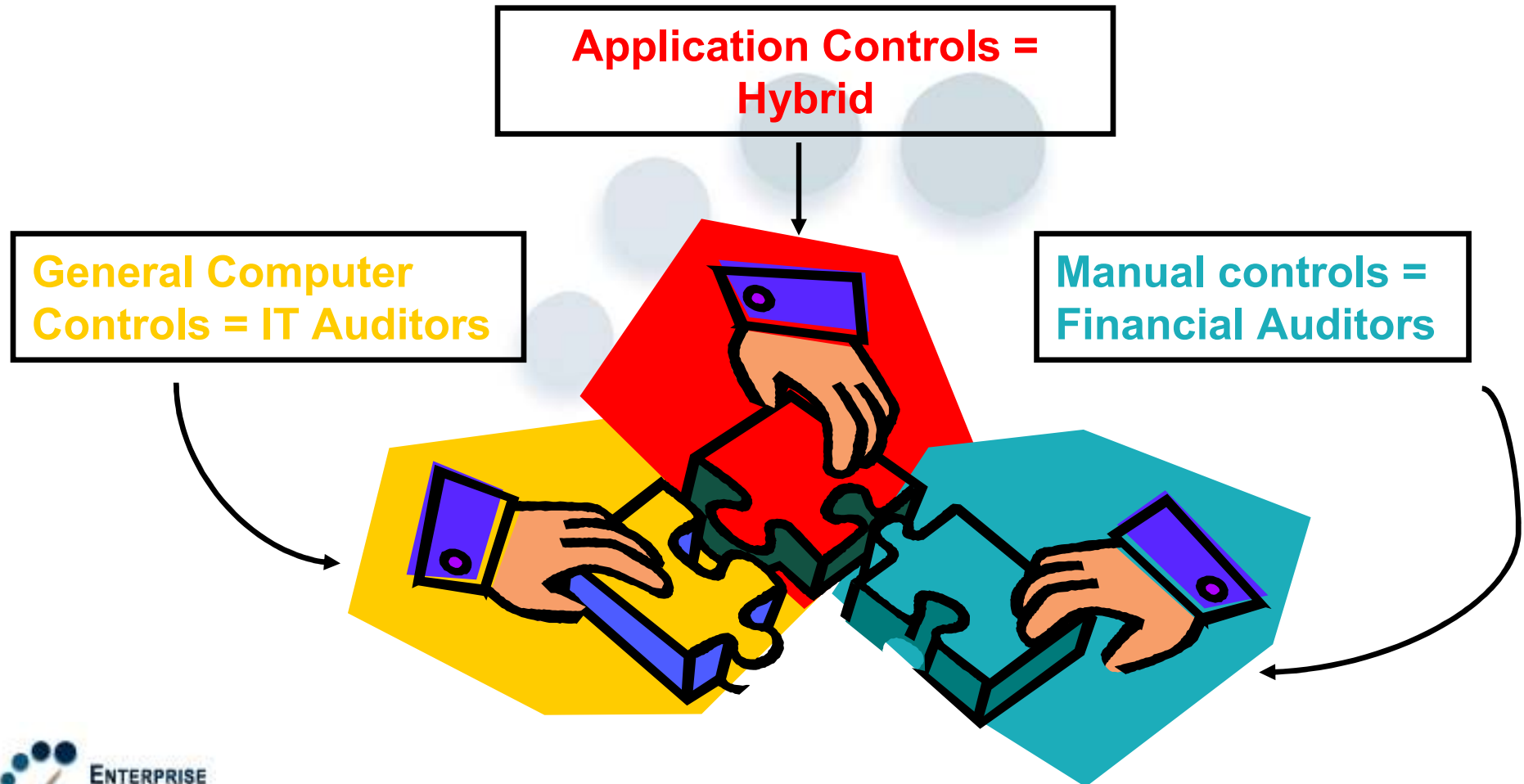
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Who Audits Application Controls?

Three Pieces of the Control Environment



Role of the Internal Auditor

- Knowledge of key IT risks, controls and audit techniques
 - All internal auditors should possess the necessary competencies to determine if business process application controls are correctly designed and operating effectively
- Service Provider
 - Assurance and compliance
 - System implementations
 - Independent risk assessment
 - Design and testing of controls
 - Education



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Audit Skills

- In-depth understanding of end-to-end business processes
 - Procure to Pay
 - Order to Cash
- Understanding of the application or modules
 - The most common knowledge gap – critical success factor
 - Demonstrated navigation, user module understanding, configuration basics and security
- Continue to see financial and IT auditors attempting to test application controls without the requisite knowledge of the application



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Risk Assessment

- Assess Business Risk
 - Top-down approach
 - What are the main risks associated with the business process(s) that run through the application?
 - Where are these process(s) operated?
 - Who operates the process(s) and transactions?
 - Assign quantitative and qualitative values with appropriate weight so as to identify where to prioritize resources and effort
- Application Inherent Risk
 - Not a question of if there are risks, but what are they and how do we address them?



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Scoping & Auditing Approaches

- Business Process Method
 - Top-down approach that covers one or more business processes that cut across one or more applications
 - Financial Statement Close Process
 - Order to Cash
 - First evaluate business risk, then correlate application and infrastructure risks
- Single Application Method
 - Focus on a single application or module
 - Can be difficult to apply in an ERP environment
- Logical Access Controls
 - Included no matter which method is chosen



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Leveraging Application Controls

- Effective use can reduce the total cost of ownership of the control environment while increasing its sustainability
 - Dependent on the effectiveness of the general computer control environment
 - Benchmarking – conclude application controls are effective year-to-year **IF**:
 - General computer controls are effective, **AND**
 - No changes have been applied to the application control programs
 - Can also be very effective at increasing the efficiency of business processes
 - Reduction of reliance on manual, detective controls

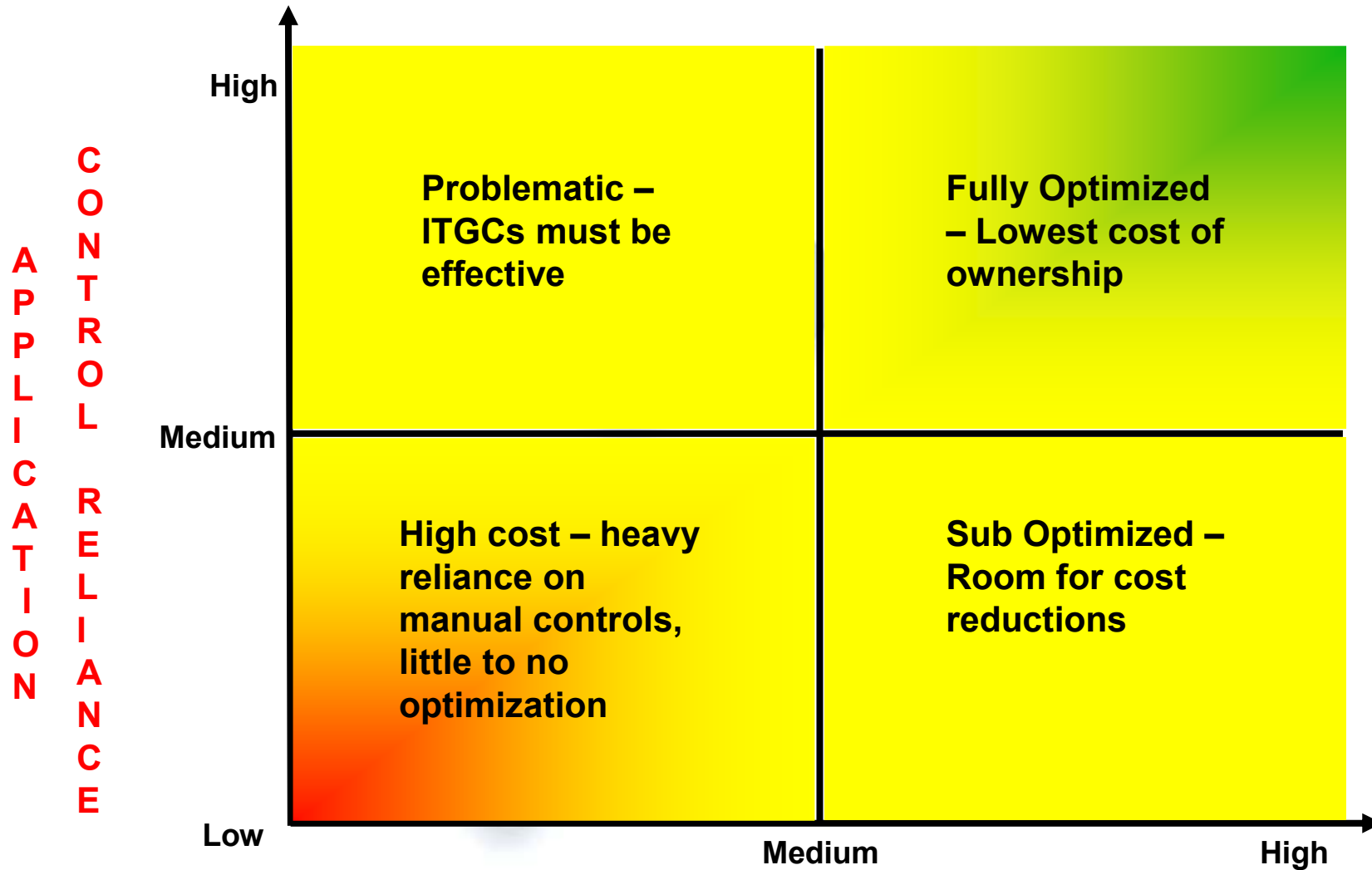


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Leveraging Application Controls

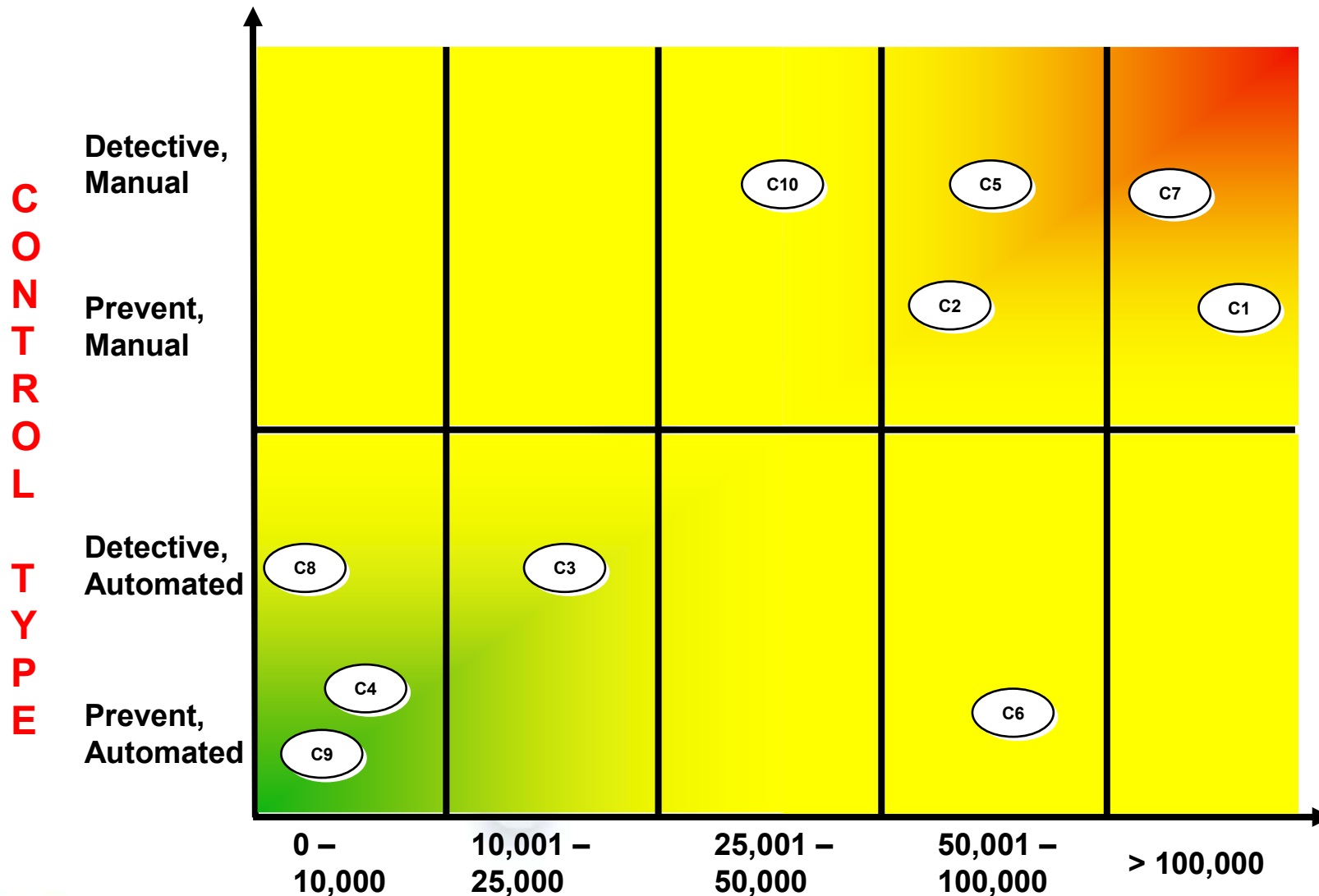


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Leveraging Application Controls



COST OF CONTROLS

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Current Trends

- **SOX 404 / AS5**
 - Companies are starting to rely more heavily on application controls in the achievement of financial statement assertions
- **SAS 104 – SAS 111**
 - SAS 109 requires a certain amount of IT control testing
 - Companies will eventually learn what the publicly-held companies are learning, that application controls are a much more cost effective and efficient solution than manual controls
- **Benchmarking**
 - Seems to be slow adoption rate
 - Requires effectiveness of program change management & effectiveness of general computing controls
 - Seems to be a lack of consistent application on how to implement effective benchmarking



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Summary

- Awareness, use and reliance on application controls has never been higher
- Conduct reviews to determine how to better leverage the investment in IT through application controls
- Be directly involved in the design of controls during application implementation efforts
 - Much more expensive to retrofit controls after the fact



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Contact Information

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