

Technology Driven Internal Audit Best Practice

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Bali, Indonesia



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TeamMate Mission

TeamMate provides solutions and expertise to auditors that improves their efficiency and effectiveness

TeamMate®

TeamMate® User Base

100,000

Auditors

2,500

Organisations

118

Countries



Agenda

1. Uses and benefits of technology
2. Practical example: IPPF compliance
3. Bringing change to your organisation



What are you currently using to manage your audit process?

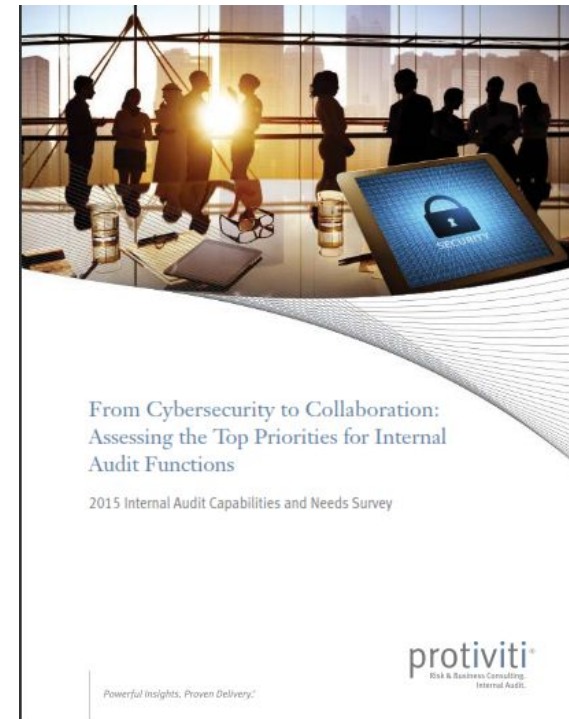
- A - Mainly Paper based
- B - Word / Excel / MS Access
- C - Use an audit management system



2015 Internal Audit Capabilities and Needs Survey

Surveyed 800 CAEs and IA Professionals

- Technology enabled auditing is on the rise
- Competing priorities driving more IA to increase investment in technology-enabled auditing



Survey Insights - Audit Process Knowledge

Key Finding: technology skills are now critical

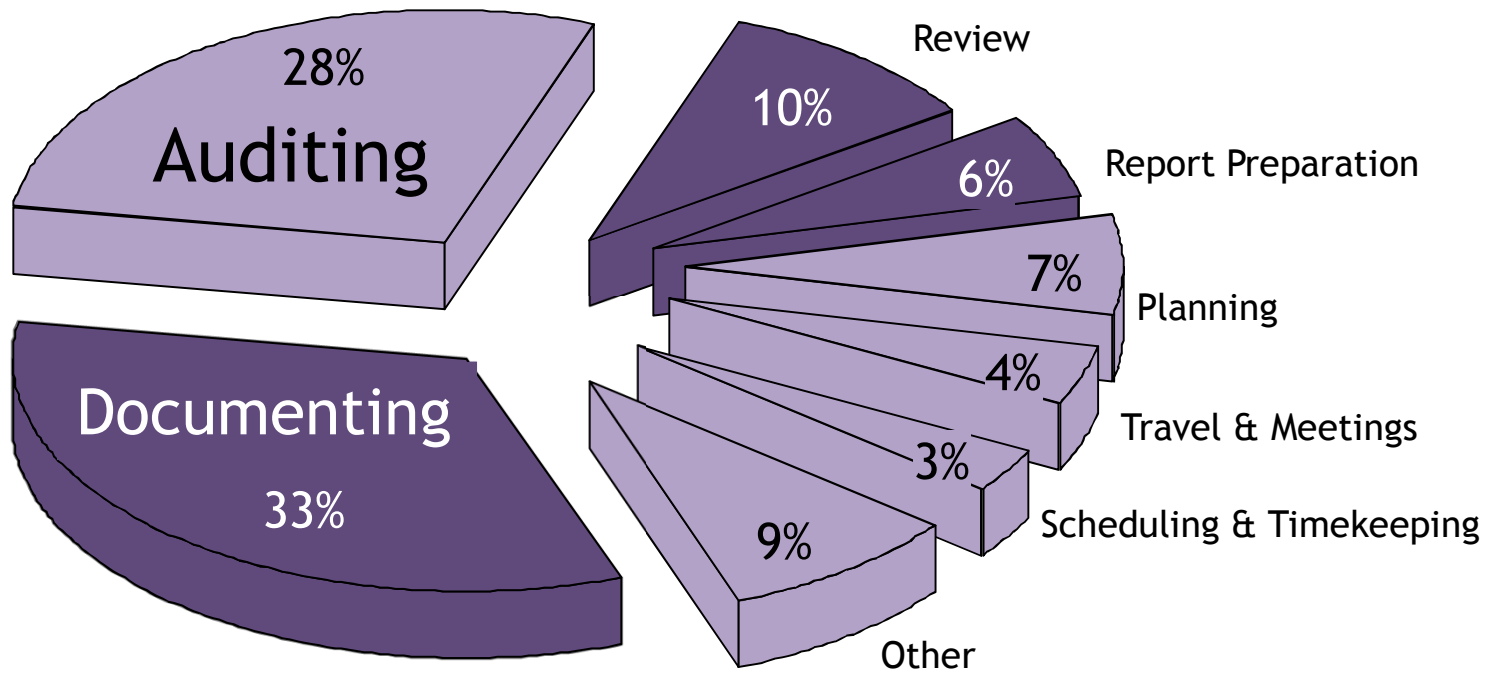
- Using/mastering new technology is recognized by CAEs/IA professionals as the most important skill
- Auditors now realising that by being more efficient, they can invest more time in strategic endeavors and bring more value to the organisation

Overall Results, Personal Skills and Capabilities – Three-Year Comparison

2015	2014	2013
Using/mastering new technology and applications	Presenting (public speaking)	Dealing with confrontation
Persuasion	Negotiation	Negotiation
Developing other board committee relationships		Persuasion
Strategic thinking	Persuasion	High-pressure meetings
Time management	Using/mastering new technology and applications	Presenting (public speaking)
	Dealing with confrontation	Strategic thinking
	Time management	Developing other board committee relationships
	Developing other board committee relationships	Using/mastering new technology and applications
	Developing outside contacts/networking	Leadership (within the IA profession)
		Time management



Audit Process

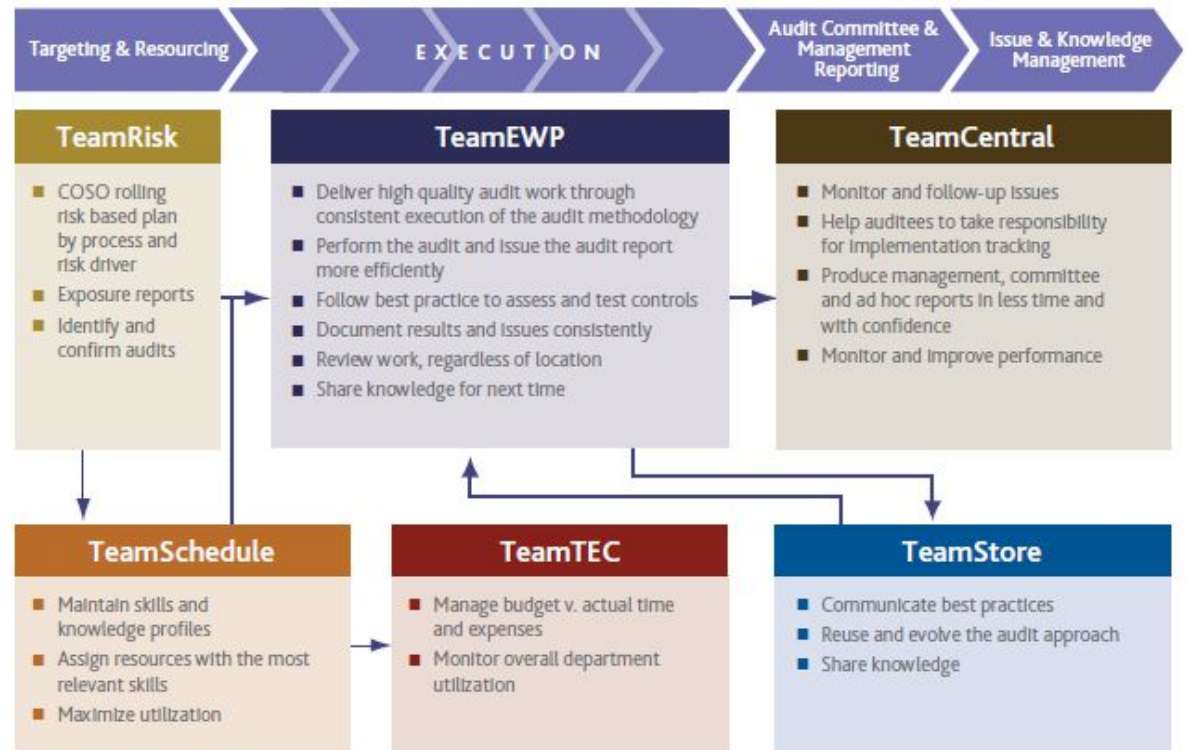


Almost 50% of your time is spent documenting, reviewing and preparing the report



What benefits will Audit Technology bring to the Audit Process?

- Standardisation
- Consistency
- Efficiencies
- Knowledge Sharing
- Integrated Audit Process
- Real time reporting



Practical example: IPPF compliance

International Professional Practices Framework

The International Professional Practices Framework (IPPF) is the conceptual framework that organizes authoritative guidance promulgated by The Institute of Internal Auditors. A trustworthy, global, guidance-setting body, The IIA provides internal audit professionals worldwide with authoritative guidance organized in the IPPF as mandatory guidance and recommended guidance.

IPPF - brief timeline

- Originally introduced in 1978 as the *Standards for the Professional Practice of Internal Auditing*.
- Replaced by the new *International Standards for the Practice of Internal Auditing* in 2002
- Revised and released in January 2009 as the International Professional Practices Framework (IPPF)
- Revised and released in January 1, 2013 as the “Red Book”
- New IPPF introduced in July 2015 - New elements introduced and Implementation Guidance to replace all existing Practice Advisories will be developed through 2016 and will be released on a quarterly basis.



Addressing IPPF with Technology

1220.A2 - In exercising due professional care internal auditors must consider the use of technology-based audit and other data analysis techniques.

Must

Unconditional
Requirement

vs

Should

Conformance is expected
unless, when applying
professional judgment,
circumstances justify
deviation.



Addressing IPPF with Technology

1. Planning
2. Resource management
3. Audit Execution
4. Communication
5. Issue Monitoring



1. Planning

2010 - Planning

The chief audit executive **must** establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals.

2010.A1 - The internal audit activity's plan of engagements **must** be based on a documented risk assessment, undertaken at least annually. The input of senior management and the board must be considered in this process.

2120 - Risk Management

The internal audit activity **must** evaluate the effectiveness and contribute to the improvement of risk management processes.



1. Planning

	Title	Impact	Likelihood	Inherent	Impact	Likelihood	Residual
▲	Atlantic Global			5,667			4,444
▲	Atlantic Incorporated			5,667			4,444
▲	Corporate Division			5,667			4,444
▲	Finance			6,000			4,400
	Corporate Accounting			0,000			0,000
▲	Accounts Receivable			7,333			4,667
	To accurately and adequately mitiga						
▲	Receivables are inaccurately pro	●●○	●●●	8,000	●●○	●○○	4,000
	Receivable balances must be						
▶	Allowance for doubtful accounts i	●●●	●●○	8,000	●●●	●○○	6,000
▶	Revenue might be recognized in	●●○	●●○	6,000	●●○	●○○	4,000
▶	Accounts Payable			4,000			4,000
	Procurement			0,000			0,000
	Treasury			0,000			0,000
	Assets			0,000			0,000
▶	Information Technology			5,000			4,500
▶	Tax			6,667			5,333
▶	Human Resources			5,333			4,000
	Inventory			0,000			0,000

Entity	Inherent	Residual
Information Tech...	8	7.5
IT Security	8	7.5
Accounts Receiv...	7.333	4.667
Benefits	7	6
Tax	6.667	5.333
Sales tax	6.667	5.333
Atlantic Incorpor...	6.444	5.333
Corporate Divisi...	6.444	5.333
Finance	6	4.4
Human Resourc...	5.667	4.667
Payroll	5	4
Accounts Payable	4	4
Corporate Accou...	0	0
Procurement	0	0
Treasury	0	0
Assets	0	0
Application Oper...	0	0
Helpdesk	0	0
Network Services	0	0
Web Services	0	0
International	0	0
Income tax	0	0
Professional De...	0	0
Learning and Ed...	0	0
Inventory	0	0



Excel not good enough ...

July 21, 2015 5:18 pm

A testing time for spreadsheets



Lisa Pollack

Share Author alerts Print Clip

Comments

Despite users being dangerously error-prone, training in best practices is rarely given

14-01	\$	8,336.36	\$	
15-01	\$	8,130.02	\$	
16-01	\$	7,922.69	\$	
17-01	\$	7,714.36	\$	246.56
18-01	\$	7,505.02	\$	246.56
19-01	\$	7,294.68	\$	246.56
20-01	\$	7,083.31	\$	246.56

A computer screen shows a financial spreadsheet

It's an awkward truth that popular psychology books equipped me for office life better than two university degrees. Knowledge imparted by *Working With You is Killing Me: Freeing Yourself from Emotional Traps at Work* and *Throwing the Elephant: Zen and the Art of Managing Up* has been applied at times with daily frequency. On the other hand, insights gleaned from monetary economics have become little more than fond intellectual memories.

“5.2 per cent of numerical or formulaic cells contain an error. From this follows the estimate that 94 per cent of spreadsheets contain errors.”



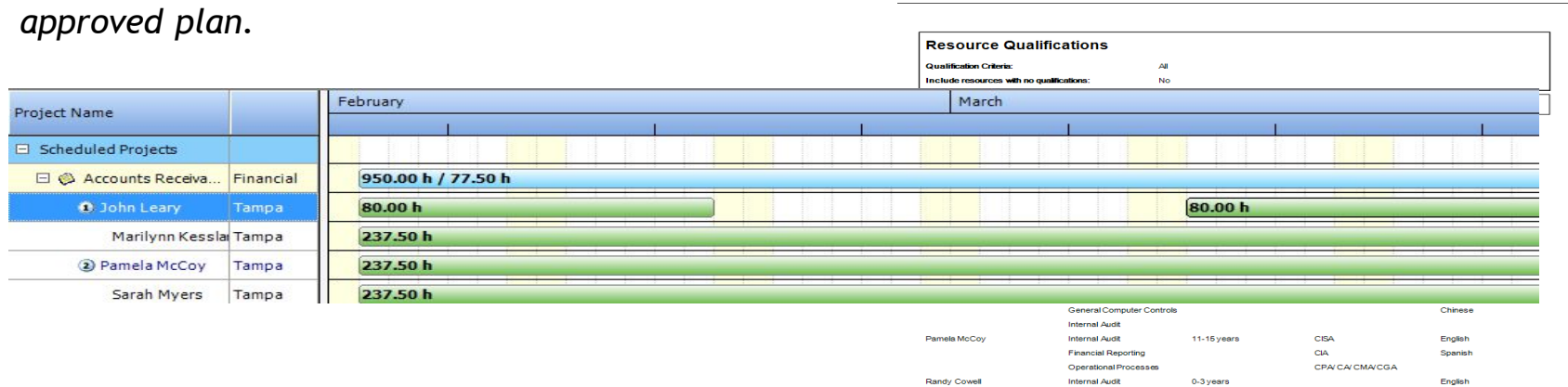
2. Resource Management

2030 - Resource Management

The chief audit executive **must** ensure that internal audit resources are appropriate, sufficient, and effectively deployed to achieve the approved plan.

Interpretation:

Appropriate refers to the mix of knowledge, skills, and other competencies needed to perform the plan. Sufficient refers to the quantity of resources needed to accomplish the plan. Resources are effectively deployed when they are used in a way that optimizes the achievement of the approved plan.



2. Resource Management

2230 - Engagement Resource Allocation

Internal auditors **must** determine appropriate and **sufficient resources** to achieve engagement objectives based on an evaluation of the nature and complexity of each engagement, time constraints, and available resources.

The screenshot shows the 'Resource Finder' application window for project '15 - CORP - 2 | Accounts Receivable'. The window is divided into several sections:

- Find Criteria:** Includes dropdown menus for Team, Grade, and Location, and date pickers for Start Date (2/9/2015) and End Date (3/20/2015).
- Qualifications:** A table with columns for Type and Value. The current qualifications are:

Type	Value
Skills	Operational Processes
Experience	7-10 years
Credentials	CIA
Languages	Spanish
- Matches:** A table listing potential resources with their availability percentage and specific matches.

% Avail	Resource	Matches
100	Manlynn Kessler	Operational Processes, 7-10 years, CIA, Spanish
75	Pamela McCoy	Operational Processes, CIA, Spanish
25	Chris Ryley	CIA
25	David Carr	7-10 years
25	Dimitar Dimitrov	7-10 years
25	Holly Hargarten	CIA
25	Karen Peary	Operational Processes
25	Randy Cowell	Operational Processes

At the bottom right, there is an 'Allocation %' field set to 100, and 'Assign' and 'Close' buttons.



3. Audit Execution

2240 - Engagement Work Program

Internal auditors **must** develop and document work programs that achieve the engagement objectives.

2240.A1 - Work programs **must** include the procedures for identifying, analyzing, evaluating, and documenting information during the engagement. The work program must be approved prior to its implementation, and any adjustments approved promptly.

2300 - Performing the Engagement

Internal auditors **must** identify, analyze, evaluate, and document sufficient information to achieve the engagement's objectives.

2340 - Engagement Supervision

Engagements **must** be properly supervised to ensure objectives are achieved, quality is assured, and staff is developed.



3. Audit Execution

2330 - Documenting Information

Internal auditors **must** document relevant information to support the conclusions and engagement results.

2330.A1 - The chief audit executive **must** control access to engagement records. The chief audit executive must obtain the approval of senior management and/or legal counsel prior to releasing such records to external parties, as appropriate.

2330.A2 - The chief audit executive **must** develop retention requirements for engagement records, regardless of the medium in which each record is stored. These retention requirements must be consistent with the organization's guidelines and any pertinent regulatory or other requirements.

2330.C1 - The chief audit executive **must** develop policies governing the custody and retention of consulting engagement records, as well as their release to internal and external parties. These policies must be consistent with the organization's guidelines and any pertinent regulatory or other requirements.



3. Audit Execution

The screenshot displays the TeamEWP Explorer application window. The title bar reads "TeamEWP Explorer : R11 NEW [CHRIS RYLEY]". The interface includes a toolbar with icons for Open, New, Delete, Restore, Replica, Filter, Organize, Refresh, Tools, Dashboard, and Close. Below the toolbar are tabs for "Recent Projects", "Sample", "Replica", and "Backups". A search bar labeled "Find:" is present. The main area contains a table of audit projects with columns for Project Name, Project Code, Start Date, Time Progress, Procedure Progress, Status, and Priority. The bottom section shows "My Assignments" with "My Procedures and Work Papers (7)" and "My Notes (1)". On the right side, there are "Project Snapshot" and "Project Milestones" buttons. The status bar at the bottom left shows "R11 NEW [CHRIS RYLEY]".

Project Name	Project Code	Start Date	Time Progress	Procedure Progress	Status	Priority
2014 Accounts Payable Review	14-CORP-009	01/09/14	79%	Progress bar	Implementation Tracking	High
2014 Continuous Monitoring - Vendor Management	14-CORP-011	06/01/14	62%	Progress bar	Issued	High
2014 Data Control Analysis	14-CORP-010	13/01/14	148%	Progress bar	Implementation Tracking	High
2014 Europe Data Center IT Audit	14-IT-004	05/05/14	145%	Progress bar	Implementation Tracking	High
2014 International Business Development Audit	14-BDEV-007	12/05/14	128%	Progress bar	Implementation Tracking	High
2014 Market Research Analysis Review	14-CORP-012	09/04/14	156%	Progress bar	Implementation Tracking	High
2014 Network and Infrastructure Audit	14-IT-002	06/01/14	74%	Progress bar	Implementation Tracking	High
2014 North America West Coast Data Center Audit	14-IT-006	02/09/14	95%	Progress bar	Implementation Tracking	High
2014 Product Management Operations Audit	14-PDEV-003	03/03/14	123%	Progress bar	Implementation Tracking	High



3. Audit Execution - Data Analytics

1220.A2 - In exercising due professional care internal auditors **must** consider the use of technology-based audit and other data analysis techniques.

2320 - Analysis and Evaluation

Internal auditors **must** base conclusions and engagement results on appropriate analyses and evaluations.



4. Communication

2400 - Communicating Results

Internal auditors **must** communicate the results of engagements.

2410 - Criteria for Communicating

Communications **must** include the engagement's objectives and scope as well as applicable conclusions, recommendations, and action plans.

2420 - Quality of Communications

Communications **must** be accurate, objective, clear, concise, constructive, complete, and **timely**.

2410.A2 - Internal auditors are **encouraged** to acknowledge satisfactory performance in engagement communications.



4. Communication

2060 - Reporting to Senior Management and the Board

The chief audit executive **must** report periodically to senior management and the board on the internal audit activity's purpose, authority, responsibility, and performance relative to its plan. Reporting must also include significant risk exposures and control issues, including fraud risks, governance issues, and other matters needed or requested by senior management and the board.

Project Code	Status	Type	Location	Project Manager
Human Resources Compliance Review - 13-CORP-06	Scheduled	Operational	North America	
Income Tax Audit - 09-CORP-07	Closed	Financial	North America	Pamela McCoy
Information Technology Compliance Audit - 10-CORP-16	Closed	Information Technology	North America	
Information Technology Compliance Audit - 15-CORP-1	Planning	Information Technology	North America	
INTU Web Server Review - 10-CORP-19	Closed	Information Technology	North America	John Leary
IT Security - 15 - CORP - 6	Scheduled	Information Technology	North America	
IT Security Audit - 13-CORP-02	Planning	Information Technology	North America	Sarah Myers
JEPF - Network Application Review - 07-CORP-13	Implementation Tracking	Information Technology	Asia	Mike Evans
JEPF - Network Application Review - 07-CORP-13	Closed	Information Technology	Asia	John Leary
JETT Application Review - 09-CORP-01	Closed	Information Technology	North America	Pamela McCoy
JNNR Network Server Review - 11-CORP-01	Implementation Tracking	Information Technology	North America	Mike Evans

Milestone	Milestone Age	Milestone Estimated Date	Milestone Revised Date	Milestone Actual Date
Send Audit Notification Letter	0	2/7/2011		2/7/2011
Planning	1	2/21/2011		2/22/2011
Complete Planning Memo	0	2/14/2011		2/14/2011
Opening Meeting	1	2/21/2011		2/22/2011
Fieldwork	0	2/23/2011		2/23/2011
Report Draft	3	3/25/2011		3/28/2011
Closing Meeting	0	3/18/2011		3/18/2011
Mgmt Responses	0	4/1/2011		4/1/2011
Report Final	0	4/8/2011		4/8/2011
Audit Closed	0	4/11/2011		4/11/2011

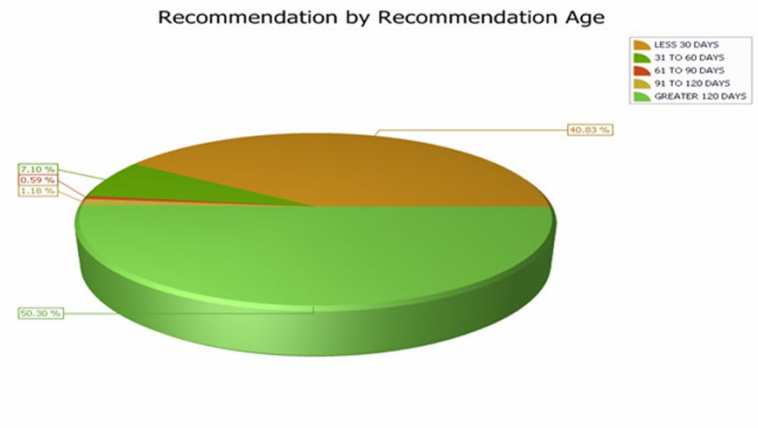


5. Issue Monitoring

2500 - Monitoring Progress

The chief audit executive **must** establish and maintain a system to monitor the disposition of results communicated to management.

2500.A1 - The chief audit executive **must** establish a follow-up process to monitor and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action.



Addressing IPPF with Technology

IPPF Practice Guide: Assisting Small Internal Audit Activities In Implementing the *International Standards for the Professional Practice of Internal Auditing*

Standard #	Standard Title	Degree of Challenge	Selected Guidance Comments
1000	Purpose, Authority, and Responsibility	LOW	N/A
1100	Independence and Objectivity	HIGH	N/A
1200	Proficiency and Due Professional Care	MEDIUM	<ul style="list-style-type: none"> Use a formal process that is well-organized and documented Use questionnaires, templates, guides, manuals Leverage low-cost training
1300	Quality Assurance / Improvement Program	HIGH	<ul style="list-style-type: none"> Audit review should be embedded in each audit Obtain feedback from stakeholders Annually review templates, etc.
2000	Managing the Internal Audit Activity	HIGH	<ul style="list-style-type: none"> Elements of a well-managed function Risk-based audit plan Timely and effective communications Well-established policies and procedures
2100	Nature of Work	MEDIUM	<ul style="list-style-type: none"> Use of a risk-based audit approach to ensure adequate focus on all areas mandated by the Standards
2200	Engagement Planning	HIGH	<ul style="list-style-type: none"> Risk assessment of relevant areas under review Use of checklists, work programs and documentation Use of prior reports, WP's Staffing and scheduling of appropriate level of staff

TeamMate Insights Recommended Use of Technology to Address Challenges
N/A
N/A
<ul style="list-style-type: none"> Electronic Work Papers (EWP) with embedded audit processes Knowledge repository for procedures and templates Web-based training
<ul style="list-style-type: none"> EWP used to enforce review and signoffs Survey tool to obtain feedback from stakeholders Updated and approved templates, procedures, questionnaires, etc. locked electronically
<ul style="list-style-type: none"> Use of a risk assessment tool and related audit plan EWP and knowledge tool for policies and procedures Electronic reporting and issues tracking
<ul style="list-style-type: none"> Risk tool tied to audit plan EWP to enforce audit policies and approach
<ul style="list-style-type: none"> Risk assessment tool Knowledge repository Scheduling tool
<ul style="list-style-type: none"> EWP to facilitate accumulation of documentation and audit evidence EWP to force reviews of coaching notes, signoffs and closure of files Data mining analysis tool for expanded coverage

How do you make it happen?

- Determine what you want to achieve by automating:
 - Reduced overall costs (travel, working hours, office space)
 - Improve audit quality
 - Improve audit performance
 - Increase manageability of the audit function
 - Improved career development and learning
 - Better knowledge management
 - All of the above?
- Determine what features will meet these requirements
- Be willing to change!! It's not about software ...



Ten rules for making it happen

1. Convey the right “**Tone at the Top**”
2. Be prepared to **change the organisation** (... and not just the audit department...)
3. Make **technology use** a high priority (and compulsory)
4. Engage **senior executives** from outside your department
5. **Adopt new workflows** and practices that support automation ... don't just roll your manual processes into the software

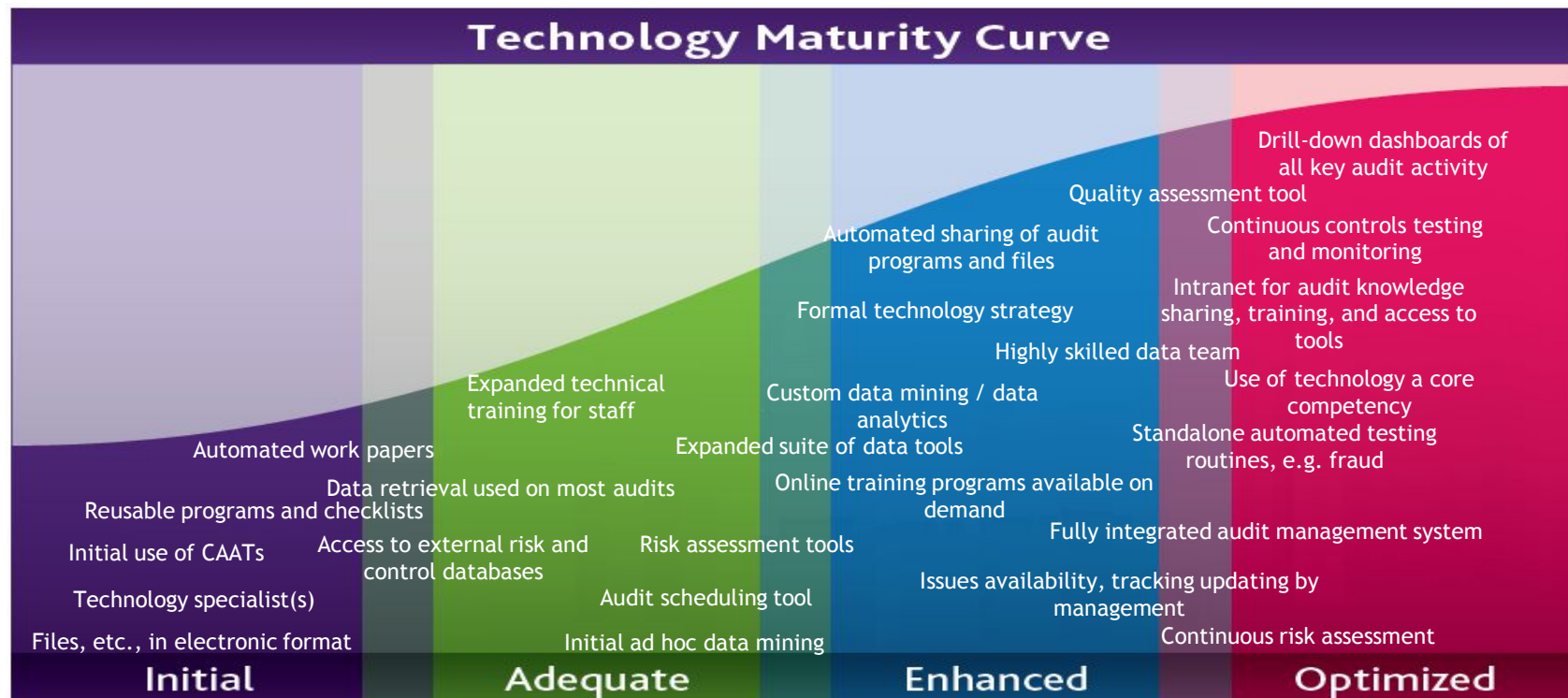


Ten rules for making it happen (cont)

6. Selectively hire technology-skilled people
7. Train, train, train ... then train some more
8. **Take time to implement:** Don't necessarily try and do everything straight away ... You can roll out different initiatives and modules over, say, a two year period
9. Report on **successes** and celebrate and reward good practices
10. Always remember: automation is about **change management**, not buying software



Technology Maturity Model



So, what next?

- Treat technology as an important, strategic imperative for internal audit
- Identify the benefits that improved technology usage can bring to your department and define priorities
- Establish a small team to review your options, make recommendations and define an implementation plan
- Change your auditing world!!



Thank you!

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