Index

2014 revised COSO framework. *See* COSO internal control framework
Association of Certified Fraud Examiners (ACFE), 666
Administrative files
  workpaper document organization, 402
AICPA fraud standards
  AU-C, Section 240, 655
  public accounting's role in fraud detection, 659
American Society for Quality (ASQ)
  ASQ Quality Audit Division (QAD), 718
  CQA requirements, 699
  quality assurance auditing, 717
  quality audit process steps, 726
  Six Sigma and Lean techniques, 746
Analytical skills
  internal audit key competencies, 355
Application control process areas
  Section 404 compliance reviews, 115
Application controls. *See* COSO internal control framework
Application input and output audit tests
  performing applications controls reviews, 548
Application input components
  internal control processes, 525
Application programs
  IT application components, 528
Application walk-through reviews
  internal audit procedures, 536
Applications testing objectives
  performing applications controls reviews, 555
Areas to audit
  assessing internal audit capabilities, 321
  audit program formats, 329
  audit universe concepts, 315
  internal audit "best evidence" classifications, 330
AS5 auditing rules
  internal audit SOx processes, 118
  Section 404 compliance reviews, 109
ASQ Quality Audit Division (QAD). *See* American Society for Quality (ASQ)
Assessing internal audit capabilities
  areas to audit, 321
Association of certified fraud examiners. *See* Fraud detection and prevention
Attributes sampling
  evaluating attributes sampling results, 258
  statistical sampling plans, 257
  testing, assessing, and evaluating audit evidence, 252
AU-C, section 240. *See* AICPA fraud standards
Auditable entities identification. *See* Audit universe concepts
Audit alternative testing approaches
  internal audit processes, 356
Audit and consulting best practices
  consulting engagement letters, 711
  developing an internal audit consulting strategy, 708
Audit charter designations
  launching an internal audit internal consulting capability, 706
Audit committee and management audit charter authorizations
  building the internal audit function, 337
  internal audit charters, 338
Audit committee financial expert
  internal audit processes, 617
  SOx requirements, 617
Audit committee governance rules. *See* SOx Title III: corporate responsibility
Audit committee responsibilities
  chief audit executive appointment, 619
  codes of conduct, 625
  internal audit charter approval, 620
  internal audit plans and budget approval, 621
  internal audit processes, 619
  whistleblower programs, 625
Audit committees
  audit committee organization, 611, 613
  authorizing, 612
  board resolution example, 612
  charters, 613
  Microsoft Corporation 2007 audit committee charter, 615
Audit evidence gathering
  computer-assisted audit techniques (CAATTs), 289
  performing effective internal audits, 204
Audit findings elements
  preliminary audit findings, 210
Auditing enterprise ethics functions
  internal audit processes, 649
Auditing applications under development
  performing applications controls reviews, 549
Auditing big data internal controls
  internal audit procedures, 518
Auditing business continuity plans
  internal audit procedures, 604
  internal audit review points, 599
  IT audit processes, 588
Auditing COSO ERM
  internal audit procedures, 177
Auditing IT general controls
  small IT business systems, 449

COPYRIGHTED MATERIAL

Auditing IT infrastructure management
ITIL® best practices, 482
Auditing IT security and privacy
IT audit processes, 576
Auditing Six Sigma processes
internal audit procedures, 757
Audit planning documentation. See *Project Management Book of Knowledge* (PMBOK)
Audit plans
performing effective internal audits, 187
Audit procedure files
workpaper document organization, 402
Audit programs
areas to audit, 329
audit universe concepts, 325, 330
internal audit preparatory activities, 199
internal audit processes, 326
Audit quality control standards. *See* PCAOB standard AS3
Audit report
audit report findings, 419
interim memo audit reports, 426
key elements, 419
questionnaire-type audit reports, 426
reporting internal audit results, 412, 417, 429
Audit sampling
computerized sampling software, 270
monetary unit sampling, 263
testing, assessing, and evaluating audit evidence, 236
Audit universe concepts
areas to audit, 315
auditable entities identification, 319
audit programs, 325
audit program maintenance, 330
control objectives identification, 321
potential problems, 351
SOx section 404 internal control reviews, 323
Audit workpapers retention
PCAOB standard AS3, 90
SOx requirements, 90
Authorizing the audit committee, 612
Availability management
ITIL service delivery, 481

Basic support principles
2014 revised COSO framework, 33
Bayesian sampling
testing, assessing, and evaluating audit evidence, 268
BCP client-server readiness review. *See* Business continuity planning (BCP)
BCP deliverables. *See* Business continuity planning (BCP)
BCP enterprise training. *See* Business continuity planning (BCP)
Benchmarking. *See* Internal audit processes
Benefits of internal audit quality assurance reviews
IIA international standards, 728
Best evidence classifications. *See* Internal audit processes
Big data analytics
compliance monitoring life cycle, 515
Big data governance, risk, and compliance issues
internal control processes, 509
Big data internal audit procedures
identifying higher-criticality applications, 514
Big data internal control issues
processes, 510
Big data management security issues
internal audit procedures, 513
Black belt body of knowledge
Six Sigma leadership roles, 751
Board audit committee communications
internal audit processes, 609, 612
Board of directors role
COSO internal control principles, 64
Brink, Victor Z., 6
Building the internal audit function
audit committee and management audit charter authorizations, 337
definition of internal auditing, 336
internal audit management responsibilities, 340
internal audit manager position description, 340
IT systems auditor basic knowledge requirements, 343
Business continuity planning (BCP)
BCP client-server readiness review, 595
BCP deliverables, 597
desktop and laptop systems BCP processes, 596
desktop, laptop, and handheld applications, 294
emergency response plans, 291
service level agreements (SLAs), 603
steps to building a BCP, 590
Business continuity planning risk management
business impact analysis, 598
internal audit processes, 589
Business fraud examples
fraud detection and prevention, 654
Business impact analysis
business continuity planning risk management, 598
Business unit-level risks
operations risk management objectives, 175
BYOD legal actions. *See* Internal control security risks
BYOD risk tolerances. *See* Internal control processes
BYOD security policy elements. *See* Internal control processes

CAATT internal audit procedures. *See* Internal audit processes
Capacity management
ITIL service delivery, 479
Cause and effect diagram
internal audit internal consulting practices, 712
CBOK concentration areas
internal audit CBOK summary, 790
CBOK for the modern internal auditor
CBOK for the modern internal auditor, 782
IIARF CBOK approaches, 781
CBOK high-level understanding
COBIT concepts and processes, 16
CBOK knowledge requirements
COSO internal control framework, 29
Intentional Standards for the Professional Practice of Internal Auditing (IPPF), 215
internal audit CBOK summary, 790
planning and performing internal audits, 16
SOx knowledge and understanding, 16
CBOK requirements
foundations of internal auditing, 782
GRC—governance, risk, and compliance—issues, 788
impact of IT on internal auditors, 786
importance of internal controls, 783
internal auditor professional requirements, 788

organizing and managing internal audit activities, 785
planning and performing internal audits, 784
professional convergence requirements, 788
CCSA requirements
other CIA certifications, 688
Certified Information Systems Auditor (CISA)
CISA examination domain areas, 695
CISA requirements, 694
Certified internal auditor requirements
internal auditor professional certifications, 330
Certified quality auditor (CQA)
requirements, 330
CFE requirements
other CISA certifications, 697
CFSA requirements
other CIA certifications, 691
CGAP requirements
other CIA certifications, 690
CGEIT requirements
other CISA certifications, 695
Change management
ITIL service support, 472
Checklist format audit program
developing and preparing audit programs, 203
internal audit processes, 328
Chief audit executive (CAE)
establishing an internal audit function, 338
internal audit responsibilities, 339
Chief audit executive appointment
audit committee responsibilities, 619
significant findings audit committee report, 624
CIA examination summary
CIA requirements, 685
CIA requirements
CIA examination summary, 685
internal auditor professional certifications, 684
CISA examination domain areas
Certified Information Systems Auditor (CISA), 695
CISA requirements
Certified Information Systems Auditor (CISA), 694
other CISA certifications, 696–697
Classifications of quality audits
quality assurance auditing, 719
Client-server budgeting system
performing applications controls reviews, 546
Client-server continuity planning
internal audit procedures, 293
Client-server system configuration
small IT business systems characteristics, 446
Client-server systems general IT controls
information systems operations, 441
Cluster selection audit sample selection
statistical sampling plans, 251
COBIT concepts and processes
CBOK high-level understanding, 16
COBIT enabler types
COBIT standards and framework, 133
COBIT framework
COBIT principle 1: meeting stakeholder needs, 128
COBIT principle 2: covering the enterprise end to end, 129
COBIT principle 3: a single integrated framework, 131
COBIT principle 4: enabling a holistic approach, 133
COBIT principle 5: separating governance from management, 135
COBIT goal and IT objective mapping
COBIT standards and framework, 138
COBIT goals and metrics
COBIT standards and framework, 132
COBIT principle 1: meeting stakeholder needs. *See* COBIT framework
COBIT principle 2: covering the enterprise end to end. *See* COBIT framework
COBIT principle 3: a single integrated framework. *See* COBIT framework
COBIT principle 4: enabling a holistic approach. *See* COBIT framework
COBIT principle 5: separating governance from management. *See* COBIT framework
COBIT process reference model
COBIT standards and framework, 136
COBIT standards and framework
COBIT enabler types, 133
COBIT goal and IT objective mapping, 138
COBIT goals and metrics, 132
COBIT process reference model, 136
ISACA, 124
principles of internal controls, 125
Code of conduct topics
code violations and corrective actions, 641
enterprise ethics issues, 639
Code of ethics, 61
adherence, 61
Code of ethics topics
COSO internal control principles, 62
Code violations and corrective actions
code of conduct topics, 641
code violations and corrective actions, 63
Codes of conduct
audit committee responsibilities, 625
Commitment to competence
COSO internal control principles, 65
Committee of sponsoring organizations (COSO)
internal control fundamentals, 30
internal controls definition, 30
Common body of knowledge (CBOK)
definition of internal auditing, 11
internal audit requirements, 11
internal controls, 15
knowledge area concepts, 13
significance of internal auditing, 3
Communicating internal audit results
internal audit performance standards, 227
Communicating internal control deficiencies
COSO internal control principles, 83
Communication problems
published audit reports, 433
Compliance monitoring life cycle
big data analytics, 515
Computer-assisted audit techniques (CAATTs)
audit evidence gathering, 289
equity funding fraud, 282
internal audit processes, 273
Computerized sampling software
audit sampling, 270
Configuration management
ITIL service support, 470

Consulting engagement letters
audit and consulting best practices, 711
Continuity management
ITIL service delivery, 482
Continuous assurance auditing
internal audit processes, 273
testing, assessing, and evaluating audit evidence, 275
Continuous monitoring
internal audit processes, 276
Control activities to mitigate risks. *See* COSO internal control principles
Control activity policies and procedures. *See* COSO internal control principles
Control environment
COSO internal control framework, 38
tone at the top, 40
Control objectives identification
audit universe concepts, 321
Control self-assessment (CSA) reviews
internal audit quality assurance review procedures, 732
Control self-assessments (CSAs)
internal audit processes, 295
Corporate responsibility for financial reports
SOx section 302, 96
COSO Enterprise Risk Management (ERM), 141, 153, 155, 163
control activities, 167
framework, 153
information and communication, 169
internal environment component, 157
key elements, 155
monitoring, 170
objective setting, 159
operations risk management objectives, 172
risk response elements, 165
COSO internal control principles
code of ethics topics, 62
integrity and ethical values, 60
COSO internal control components
COSO reporting perspective, 58
monitoring activities, 53
COSO internal control framework
2014 revised COSO framework, 30
application controls, 47
CBOK knowledge requirements, 29
changes and concepts, 32
control environment, 38
COSO internal controls pyramid view, 31
information and communication processes, 49
internal control activities, 45, 46
internal control fundamentals, 30
internal control principles, 37
ISO standards, 776
monitoring activities, 55
revised COSO framework, 35
risk assessment, 40, 41
risk identification and analysis, 41
SOx legal compliance, 34
SOx requirements, 29
transaction controls, 46
COSO internal control principles
17 COSO principles, 60
board of directors role, 64
commitment to competence, 65
communicating internal control deficiencies, 83
control activities to mitigate risks, 72
control activity policies and procedures, 74
evaluating fraud risks, 69
fraud risk assessments, 70
holding people accountable, 67
identifying changes affecting internal controls, 71
information from relevant sources, 76
internal communications, 78
methods of internal communication, 80
selecting technology controls, 73
COSO internal controls pyramid view. *See* COSO internal control framework
COSO monitoring activities. *See* COSO internal control framework
COSO reporting perspective. *See* COSO internal control components
COSO risk assessment
risk response strategies, 44
types of enterprise business risks, 43
Costs and pricing internal audit review steps
ITIL service delivery, 479
CQA requirements
ASQ internal audit certifications, 699
certified quality auditor (CQA), 720
CRMA requirements
other CIA certifications, 693
CRSIC requirements
other CISA certifications, 697
CSA processes
facilitated CSA reviews, 300
internal audit quality assurance, 297
questionnaire-based CSA reviews, 302
Cybersecurity internal audit concerns
IT network security fundamentals, 561
Cybersecurity internal controls audit procedures
internal audit processes, 578

Data profiling privacy issues
Gramm-Leach-Bliley Act (GLBA), 570
Data security concepts
IT passwords, 563
Data variety and complexity issues
internal control processes, 506
Define-Measure-Analyze-Improve-Control (DMAIC) model
Six Sigma concepts, 747
Definition of internal auditing
building the internal audit function, 336
common body of knowledge (CBOK), 11
internal auditing, 4
internal auditing's mission statement, 9
Institute of Internal Auditors (IIA), 4
mission of internal auditing, 9
self-assessment functions, 7
Deming PDCA cycle
quality assurance auditing, 724
Desktop and laptop systems BCP processes
business continuity planning (BCP), 596
Desktop, laptop, and handheld applications
business continuity planning (BCP), 294
Developing an internal audit consulting strategy
audit and consulting best practices, 708
internal audit internal consulting practices, 704
Developing and preparing audit programs

checklist format audit program, 203
petty cash audit program, 202
Disaster recovery planning
internal audit key responsibilities, 586
DMAIC model. *See* Six Sigma concepts
DMAIC procedures. *See* Six Sigma concepts
Document records management
internal audit workpapers, 409
document standards review processes
documenting audit results, 409
Documentation best practices
internal audit processes, 359
Documentation skills
internal audit key competencies, 357
Documenting audit results
document standards review processes, 409
input/output process flowcharts, 394
internal audit documentation requirements, 390
process modeling and workpapers, 390
tick marks, 406
workflow description process flowchart, 394
workpaper auditor tick marks examples, 406
workpaper point sheets, 404
Documenting field survey results
internal audit field surveys, 198
Documenting key processes
internal audit workflow processes, 393
Due professional care
internal audit attribute standards, 221
Duties and responsibilities of ASQ quality auditors
quality assurance auditing, 719
DYOD internal audit issues
internal control processes, 486

Early internal auditor responsibilities
history and background of internal auditing, 7
Elements of GRC governance
GRC concepts, 674
Elements of the negotiating process
internal audit processes, 362
Emergency response plans
business continuity planning (BCP), 291
Engagement planning
internal audit performance standards, 224
Enterprise BYOD environments
internal audit procedures, 487
Enterprise codes of conduct
enterprise governance processes, 637
Enterprise compliance processes
ethics risk environment, 634
Enterprise content management internal controls
internal control processes, 517
Enterprise content management overview
internal control processes, 519
Enterprise content management review procedures
internal audit procedures, 520
Enterprise ethics functions
ethics attitude survey questions, 636
stakeholder ethics attitude surveys, 635
Enterprise ethics issues
code of conduct topics, 639
internal audit processes, 630
Enterprise governance processes
enterprise codes of conduct, 637
ethics risk environment, 633
hotline functions, 643
mission statements, 632
whistleblower call centers, 648
whistleblower programs, 643
Enterprise internal audit consulting standards
IPPF professional standards, 702
Enterprise risk
enterprise risk types, 146
Enterprise risk management, 141, 142, 163
Enterprise risk types, 146
Enterprise social media policy
internal control processes, 500
social media computing risks, 501
Entity-level risks
risks encompassing the entire organization, 174
e-Office documentation best practices
internal audit processes, 358
Equity funding fraud
computer-assisted audit techniques (CAATTs), 282
ERM control activities
COSO ERM key elements, 167
ERM objective setting
COSO ERM, 159
Establishing an internal audit function
chief audit executive (CAE), 338
internal audit charters, 338
role of the CAE, 338
Ethics attitude survey questions
enterprise ethics functions, 636
Ethics risk environment
enterprise compliance processes, 634
enterprise governance processes, 633
Evaluating attributes sampling results
attributes sampling procedures, 258
Evaluating fraud risks
COSO internal control principles, 69

Facebook
social media example, 494
Facilitated CSA reviews
CSA processes, 300
Failed internal audit research approaches
IIARF 2007 CBOK study, 21
Federal whistleblower rules, 644
Files and databases
IT application components, 527
Financial officer codes of ethics
section 404: management's assessment of internal controls, 102
Financial management for IT services
ITIL service delivery, 477
Foundations of internal auditing
CBOK requirements, 782
Fraud detection and prevention
Association of Certified Fraud Examiners (ACFE), 666
business fraud examples, 654
internal auditor responsibilities, 664
red flags, 658
Fraud investigations
internal audit processes, 665
Fraud review objectives
internal audit processes, 666

Fraud risk assessments
COSO internal control principles, 70
Fraudulent financial reporting
Treadway Commission Report, 660

General controls
IT infrastructure internal controls reviews, 440
General controls internal audit objectives
large IT general controls preliminary survey, 457
small business IT systems, 453
General controls reviews of IT operations
IT systems general controls, 461
Global Audit Information Network (GAIN)
implementing benchmarking, 305
Governance, risk, and compliance (GRC)
GRC risk management strategies, 676
internal audit processes, 672
Gramm-Leach-Bliley Act (GLBA)
data profiling privacy issues, 570
GRC concepts
elements of GRC governance, 674
internal control processes, 673
GRC practices and principles
internal control processes, 679
GRC Risk Management Strategies
governance, risk, and compliance (GRC), 676
GRC—governance, risk, and compliance—issues
CBOK requirements, 788

Health Insurance Portability and Accountability Act (HIPAA)
IT systems privacy concerns, 570
History and background of internal auditing
early internal auditor responsibilities, 7
Institute of Internal Auditors (IIA), 6
internal auditing, 5
Victor Z. Brink, 6
Holding people accountable
COSO internal control principles, 67
Hotline functions
enterprise governance processes, 643

Identify higher-criticality applications
big data internal audit procedures, 514
Identifying changes affecting internal controls
COSO internal control principles, 71
IIA code of ethics
intentional standards for the professional practice of internal auditing (IPPF), 229
IIA F CBOK documentation approaches
internal auditor CBOK, 20
IIA GAIN benchmarking questionnaire
internal audit processes, 308
IIA international standards
benefits of internal audit quality assurance reviews, 728
IIA standards for detecting and investigating fraud, 663
internal audit quality assurance reviews, 727
IIA standards for detecting and investigating fraud
IIA international standards, 663
IIARF 2007 CBOK study
failed internal audit research approaches, 21
IIARF 2015 CBOK planned analysis
planned IIARF CBOK study, 23
IIARF prior CBOK approaches
CBOK for the modern internal auditor, 781

Impact of IT on internal auditors
CBOK requirements, 786
Implementing benchmarking
Global Audit Information Network (GAIN), 305
Implementing consulting recommendations
internal audit internal consulting practices, 713
Importance of internal controls
CBOK requirements, 783
Incident management
ITIL service support, 466
Information and communication
COSO ERM, 169
Information and communication processes
COSO internal control framework, 49
internal communications, 52
relevant information, 50
Information from relevant sources
COSO internal control principles, 76
Information systems audit specialists
internal audit organizations, 342
Information systems operations
client-server systems general IT controls, 441
IT systems general controls, 440
Information technology fraud prevention processes
internal audit processes, 667
Inherent risk
risk management fundamentals, 163
Input/Output Process Flowcharts
documenting audit results, 394
Institute of Internal Auditors (IIA)
definition of internal auditing, 4
history and background of internal auditing, 6
Integrity and ethical values
COSO internal control principles, 60
Intentional Standards for the Professional Practice of Internal Auditing (IPPF)
CBOK knowledge requirements, 215
IIA code of ethics, 229
internal audit attribute standards, 220
internal auditor code of ethics, 229
internal audit performance standards, 223
internal audit IPPF principles, 232
IPPF required and recommended elements, 217
performing effective internal audits, 214
red book standards, 218
Interim memo audit reports
audit report formats, 426
Internal audit requirements
common body of knowledge (CBOK), 11
Internal audit "best evidence" classifications
areas to audit, 330
Internal audit attribute standards
due professional care, 221
intentional standards for the professional practice of internal auditing (IPPF), 220
quality assurance programs, 222
Internal audit BCP review procedures
IT audit processes, 292
Internal audit benchmarking
internal audit processes, 305
Internal audit CBOK summary
CBOK concentration areas, 790
CBOK knowledge requirements, 790
Internal audit charter approval
audit committee responsibilities, 620

Internal audit charters
audit committee authorizations, 338
establishing an internal audit function, 338
internal audit processes, 335
performing effective internal audits, 186
Internal audit communications
published audit reports, 433
Internal audit data center reviews
IT systems general controls, 460
Internal audit department privacy and security
internal audit processes, 581
workpaper security, 582
Internal audit documentation best practices
internal audit key competencies, 359
Internal audit documentation requirements
documenting audit results, 390
process modeling for internal auditors, 391
Internal audit engagement letters
internal audit field surveys, 194
Internal audit essential knowledge areas
internal auditor CBOK, 25
Internal audit field surveys
documenting field survey results, 198
internal audit engagement letters, 194
internal audit preparatory activities, 195
Internal audit fieldwork
monitoring internal audit fieldwork, 209
performing effective internal audits, 206
preliminary audit findings, 208
Internal audit fraud detection signs
red flags, 657
Internal audit GRC approaches a
internal audit processes, 672
Internal audit health check assessment
internal audit processes, 618
Internal audit internal consulting practices
cause and effect diagram, 712
developing an internal audit consulting strategy, 704
implementing consulting recommendations, 713
Internal audit interview skills
internal audit key competencies, 354
Internal audit IPPF principles
intentional standards for the professional practice of internal auditing (IPPF), 232
Internal audit key competencies
analytical skills, 355
documentation skills, 357
internal audit documentation best practices, 359
internal audit interview skills, 354
internal auditor commitments to learning, 363
internal audit processes, 352
negotiation skills, 361
testing skills competencies, 356
Internal audit key responsibilities
disaster recovery planning, 586
Internal audit manager position description
building the internal audit function, 340
Internal audit organization
planning internal audits, 183
Internal audit organizations
information systems audit specialists, 342
internal auditor staff-level position description, 342
Internal audit performance standards
communicating internal audit results, 227
engagement planning, 224
intentional standards for the professional practice of internal auditing (IPPF), 223
managing the internal audit activity, 223
performing an internal audit engagement., 226
Internal audit plans and budgets approval
audit committee responsibilities, 621
Internal audit preliminary surveys
internal audit preparatory activities, 190
Internal audit preparatory activities
audit programs, 199
internal audit field surveys, 195
internal audit preliminary surveys, 190
planning internal audits, 185
Internal audit principles
ISACA code of professional ethics, 231
Internal audit procedures
application walk-through reviews, 536
auditing big data internal controls, 518
auditing business continuity plans, 604
auditing COSO ERM, 177
auditing Six Sigma processes, 757
big data management security issues, 513
client-server continuity planning, 293
enterprise BYOD environments, 487
enterprise content management review procedures, 520
international auditing standards, 777
IT application controls, 524
IT application review control objectives, 540
ITIL® configuration management, 472
object-oriented programming (OOP concepts, 530
performing applications controls reviews, 534
preimplementation review objectives, 551
purchased software internal controls audit checklist, 532
review of a Six Sigma program, 759
Six Sigma and Lean techniques, 756
social media internal audit issues, 492, 504
Internal audit process: summarized steps
performing effective internal audits, 214
Internal audit processes
audit alternative testing approaches, 356
audit committee financial expert, 617
audit committee responsibilities, 619
audit program formats, 326
audit universe schedule potential problems, 351
auditing enterprise ethics functions, 649
benchmarking, 295
best evidence classifications, 330
board audit committee communications, 609, 612
business continuity planning risk management, 589
CAATT internal audit procedures, 283
checklist-format audit programs, 328
computer-assisted audit techniques (CAATTs), 273
continuous assurance auditing, 273
continuous monitoring, 276
control self-assessments (CSAs), 295
cybersecurity internal controls audit procedures, 578
documentation best practices, 359
elements of the negotiating process, 362
enterprise ethics issues, 630
e-Office documentation best practices, 358
fraud investigations, 665
fraud review objectives, 666
governance, risk, and compliance (GRC), 672
IIA GAIN benchmarking questionnaire, 308
information technology fraud prevention processes, 667

Internal audit processes (*continued*)
internal audit benchmarking, 305
internal audit charters, 335
internal audit department privacy and security, 581
internal audit GRC approaches, 672
internal audit health check assessment, 618
internal audit key competencies, 352
internal audit quality assurance reviews, 727
internal audit quality review steps, 738
internal audit report objectives, 413
internal audit report privacy, 584
internal audit workpaper security best practices, 583
project management, 366
quality assurance reviews of the internal audit function, 727
quality review engagement memo, 736
reporting audit results, 360
reporting internal audit results, 411
reporting the results of an internal audit quality assurance review, 741
reviews of compliance activities, 678
section 404 compliance reviews, 110
Six Sigma and Lean techniques, 746
SOx whistleblower, 646
understanding and recognizing fraud, 655
Internal audit project management
Project Management Institute's *Project Management Body of Knowledge* (PMBOK), 365
Internal audit quality assurance
CSA processes, 297
Internal audit quality assurance review procedures
control self-assessment (CSA) reviews, 732
QA reviews of individual completed audits, 739
quality assurance auditing, 731
quality assurance review approaches, 734
Internal audit quality assurance reviews
IIA international standards, 727
internal audit processes, 727
quality assurance auditing, 730
Internal audit quality review steps
internal audit processes, 738
Internal audit report objectives
internal audit processes, 413
reporting internal audit results, 423
Internal audit report privacy
internal audit processes, 584
Internal audit responsibilities
chief audit executive (CAE), 339
Internal audit review points
auditing business continuity processes, 599
Internal audit risk management
managing the internal audit universe, 353
Internal audit SOx processes
AS5 auditing rules, 118
Internal audit workflow processes
documenting key processes, 393
Internal audit workpaper security best practices
internal audit processes, 583
Internal audit workpapers
document records management, 409
process modeling, 396
travel audit workpaper example, 404
workpaper objectives, 397
workpaper preparation techniques, 405
workpaper review processes, 407
Internal auditing
definition of internal auditing, 4
history and background of internal auditing, 5
Internal auditing motto
Progress through Sharing, 11
Internal auditing's mission statement
definition of internal auditing, 9
Internal Standards for the Professional Practice of Internal Auditing (IPPF), 9
IPPF, 9
Internal auditor CBOK
IIA Research Foundations's CBOK documentation approaches, 20
internal audit essential knowledge areas, 25
Internal Standards for the Professional Practice of Internal Auditing (IPPF), 16
objectives of this book, 14
Internal auditor code of ethics
Intentional Standards for the Professional Practice of Internal Auditing (IPPF), 229
Internal auditor commitments to learning
internal audit key competencies, 363
Internal auditor professional certifications
certified internal auditor requirements, 684
CIA requirements, 684
value of CIA specialty certifications, 693
Internal auditor professional requirements
CBOK requirements, 788
Internal auditor responsibilities
fraud detection and prevention, 664
Internal auditor staff-level position description
internal audit organizations, 342
Internal communications
COSO internal control principles, 78
information and communication processes, 52
International Organization for Standardization (ISO), 762
Internal control activities
COSO internal control framework, 45, 46
transaction control activities, 48
Internal control components
internal control principles, 33
Internal control concerns
small IT business systems characteristics, 449
Internal control evaluations
monitoring COSO internal controls, 83
Internal control fundamentals
committee of sponsoring organizations (COSO), 30
COSO internal control framework, 30
major components of internal control, 33
Internal control principles
COSO internal control framework, 37
internal control components, 33
three components of internal control, 33
Internal control processes
application input components, 525
big data governance, risk, and compliance issues, 509
big data internal control issues, 510
BYOD risk tolerances, 488
BYOD security policy elements, 488
data variety and complexity, 506
DYOD internal audit issues, 486
enterprise content management internal controls, 517
enterprise content management overview, 519
enterprise social media policy, 500

IT application components, 524
IT application output components, 533
GRC concepts, 673
GRC practices and principles, 679
Internal control security risks
BYOD legal actions, 489
IT social engineering security risk methods, 569
NIST cybersecurity framework, 573
NIST implementation steps, 575
NIST tiers of cybersecurity maturity, 573
social engineering IT risks, 568
Internal controls
common body of knowledge (CBOK), 15
Internal controls changes and concepts
2014 revised COSO framework, 32
Internal controls definition
committee of sponsoring organizations (COSO), 30
Internal environment component. *See* COSO Enterprise Risk Management (ERM)
Internal Standards for the Professional Practice of Internal Auditing (IPPF)
internal auditing's mission statement, 9
internal auditor CBOK, 16
International auditing standards
internal audit procedures, 777
Interval selection audit sample selection
statistical sampling plans, 250
IPPF
internal auditing's mission statement, 9
mission statements, 9
IPPF professional standards
enterprise internal audit consulting standards, 702
IPPF required and recommended elements
Intentional Standards for the Professional Practice of Internal Auditing (IPPF), 217
ISACA
COBIT standards and framework, 124
ISACA code of professional ethics
internal audit principles, 231
ISO
international organization for standardization, 762
ISO standards overview, 764
worldwide internal audit standards, 762
ISO 2000
service quality management, 771
ISO 27002
ISO IT security standards, 768
ISO 27002
IT security standards, 768
IT security technique requirements, 770
ISO 38500
IT governance standard, 772
ISO 38500 model
IT governance standard, 774
objectives, 772
ISO 9000 standards
quality assurance auditing, 723
ISO 9001 quality management systems
ISO standards, 765
quality management system processes, 767
ISO certification processes
ISO standards, 764
ISO documentation hierarchy, 768
ISO standards
COSO internal control framework, 776
ISO certification processes, 764
ISO documentation hierarchy, 768
ISO 9001 quality management systems, 765
ISO 38500 objectives, 772
ISO standards overview
ISO, 764
IT application audit test procedures
reviewing application management controls, 543
IT application components
application programs, 528
files and databases, 527
internal control processes, 524
IT application development review guidelines, 531
IT application controls
internal audit procedures, 524
IT application development review guidelines
IT application components, 531
IT application output components
internal control processes, 533
IT application review control objectives
internal audit procedures, 540
IT audit processes
auditing business continuity processes, 588
auditing IT security and privacy, 576
internal audit BCP review procedures, 292
IT control hierarchy
selecting technology controls, 73
IT disaster recovery plans
IT security processes, 585
IT governance standard
ISO 38500, 772, 774
IT infrastructure internal control reviews
general controls, 440
IT network security fundamentals
cybersecurity internal audit concerns, 561
IT security threats, 561
password logon process, 564
system firewall controls, 566
viruses and malicious program code, 565
IT passwords
data security concepts, 563
IT security processes
IT disaster recovery plans, 585
IT security technique requirements
ISO 27002, 770
IT security threats
IT network security fundamentals, 561
IT systems privacy concerns, 570
target corporation security breach, 562
IT social engineering security risk methods
internal control security risks, 569
IT systems auditor basic knowledge requirements
building the internal audit function, 343
IT systems general controls
general controls reviews of IT operations, 461
information systems operations, 440
internal audit data center reviews, 460
ITIL® service support IT infrastructure best practices, 465
large IT systems, 454
large IT systems general controls review objectives, 462
legacy systems, 453
mainframe legacy system controls, 455
operating systems software, 458
small IT business systems characteristics, 444

IT systems privacy concerns
IT security threats, 570
Health Insurance Portability and Accountability Act (HIPAA), 570
PCI DSS goals and requirements, 580
ITIL framework
ITIL® best practices, 466
service delivery best practices, 475
ITIL service delivery
availability management, 481
capacity management, 479
continuity management, 482
costs and pricing internal audit review steps, 479
financial management for IT services, 477
service level management, 475
ITIL service support
configuration management, 470
change management, 472
incident management, 466
problem management, 469
release management, 474
ITIL® best practices
auditing IT infrastructure management, 482
ITIL framework, 466
ITIL® configuration management
internal audit procedures, 472
ITIL® service support IT infrastructure best practices
IT systems general controls, 465

Johnson & Johnson tylenol crisis
mission statements, 632
Judgmental sampling
testing, assessing, and evaluating audit evidence, 239

Knowledge area concepts
common body of knowledge (CBOK), 13

Large IT general controls preliminary survey
general controls internal audit objectives, 457
Large IT systems
general controls, 454
legacy systems, 454
Large IT systems general controls review objectives
IT systems general controls, 462
Launching an enterprise Six Sigma project
quality assurance processes, 752
Launching an internal audit internal consulting capability
audit charter designations, 706
strategic decisions, 705
Lean Six Sigma
concepts, 754
Legacy systems
IT systems general controls, 453
large IT systems, 454
Legal and regulatory compliance risk objectives
risk management fundamentals, 173
LinkedIn
social media example, 497

Mainframe legacy system controls
IT systems general controls, 455
Major components of internal control
internal control fundamentals, 33
Managing the internal audit activity
internal audit performance standards, 223
Managing the internal audit universe
internal audit risk management, 353
Methods of internal communication
COSO internal control principles, 80
Microsoft Corporation 2007 Audit Committee Charter
Audit Committee Organization, 615
Mission of internal auditing
definition of internal auditing, 9
Mission statements
enterprise governance processes, 632
IPPF, 9
Johnson & Johnson Tylenol Crisis, 632
Monetary unit sampling
audit sampling, 263
testing, assessing, and evaluating audit evidence, 264
Monitoring activities
COSO internal control components, 53
Monitoring COSO internal controls
internal control evaluations, 83
Monitoring internal audit fieldwork
internal audit fieldwork, 209
Multistage sampling
testing, assessing, and evaluating audit evidence, 267

Negotiation skills
internal audit key competencies, 361
NIST cybersecurity framework
internal control security risks, 573
NIST implementation steps
internal control security risks, 575
NIST tiers of cybersecurity maturity
internal control security risks, 573

Object-oriented programming (OOP concepts
internal audit procedures, 530
Objectives of this book
internal auditor CBOK, 14
Online Privacy and E-Commerce Issues
radio frequency identification (RFID) Privacy issues, 570
Operating systems software
IT systems general controls, 458
Operations IT internal controls
small IT business systems characteristics, 447
Operations risk management objectives
business unit–level risks, 175
COSO ERM key elements, 172
Opt-out rights
U.S. Federal Privacy Protection Laws, 572
Organizing and managing internal audit activities
CBOK requirements, 785
Other CIA certifications
CCSA requirements, 688
CFSA requirements, 691
CGAP requirements, 690
CRMA requirements, 693
QIAL requirements, 693
Other CISA certifications
CFE requirements, 697
CGEIT requirements, 695
CISM requirements, 696
CISSP requirements, 697
CRSIC requirements, 697

Pareto Chart Example
quality assurance auditing, 722
Password logon process
IT network security fundamentals, 564
PCAOB public accounting firm registration
Public Company Accounting Oversight Board (PCAOB), 88
PCAOB standard AS3
audit quality control standards, 90
audit workpapers retention, 90
PCI DSS fundamentals
U.S. Federal Privacy Protection Laws, 579
PCI DSS goals and requirements
IT systems privacy concerns, 580
Performing an internal audit engagement.
internal audit performance standards, 226
Performing applications controls reviews
application input and output audit tests, 548
applications testing objectives, 555
auditing applications under development, 549
client-server budgeting system, 546
internal audit procedures, 534
preimplementation review requirements definition checklist, 554
testing audit control objectives, 541
tests of compliance, 548
Performing appropriate internal audit procedures
project management institutes PMBOK processes, 383
Performing effective internal audits
audit evidence, 204
audit plans, 187
intentional standards for the professional practice of internal auditing (IPPF), 214
internal audit charters, 186
internal audit fieldwork, 206
internal audit process: summarized steps, 214
Permanent files
workpaper document organization, 401
Petty cash audit program
developing and preparing audit programs, 202
Planned IIARF CBOK study
IIARF 2015 CBOK study, 23
Planning an internal audit
Project Management Book of Knowledge (PMBOK), 378
Planning and performing internal audits
CBOK knowledge requirements, 16
CBOK requirements, 784
Planning audits
project management, 366
workpaper standards, 398
Planning internal audits
internal audit organization, 183
internal audit preparatory activities, 185
PMBOK process steps
Project Management Book of Knowledge (PMBOK), 369
PMBOK program and portfolio management
Project Management Book of Knowledge (PMBOK), 375, 377
PMBOK project management plan
project management institutes PMBOK processes, 374
PMI definition of a project
Project Management Institute (PMI), 367
project, program, and portfolio management interactions, 376
PMI risk management components
Project Management Book of Knowledge (PMBOK), 369
PMI risk management data flow
Project Management Book of Knowledge (PMBOK), 369
Preimplementation review objectives
internal audit procedures, 551
Preimplementation review requirements definition checklist
performing applications controls reviews, 554
Preliminary audit findings
audit findings elements, 210
internal audit fieldwork, 208
Preliminary findings point sheet
wrapping up an internal audit, 385
Principles of internal controls
COBIT standards and framework, 125
Probability and uncertainty
risk assessment analysis, 148
Problem management
ITIL service support, 469
Process modeling
internal audit workpapers, 396
Process modeling and workpapers
documenting audit results, 390
process modeling hierarchy, 392
Process modeling for internal auditors
internal audit documentation requirements, 391
Process modeling hierarchy
process modeling and workpapers, 392
Professional convergence requirements
CBOK requirements, 788
Progress through Sharing
internal auditing motto, 11
Project management. See also Project Management Institute (PMI); *Project Management Book of Knowledge* (PMBOK)
internal audit processes, 366
planning audits, 366
Project Management Book of Knowledge (PMBOK)
audit planning documentation, 381
best practices, 386
internal audit project management, 365
planning an internal audit, 378
PMBOK process steps, 369
PMI risk management components, 369
PMI risk management data flow, 369
PMBOK program and portfolio management, 375, 377
project management best practices, 386
project, program, and portfolio management relationships, 378
Project Management Institute (PMI)
definition of a project, 367
institutes PMBOK processes, 367
Project Management Institutes PMBOK processes
performing appropriate internal audit procedures, 383
PMBOK project management plan, 374
Project Management Institute (PMI), 367
Project, program, and portfolio management interactions
PMI definition of a project, 376
Project, program, and portfolio management relationships
Project Management Book of Knowledge (PMBOK), 378
Public accounting's role in fraud detection
AICPA fraud standards, 659

Public Company Accounting Oversight Board (PCAOB)
PCAOB public accounting firm registration, 88
Sarbanes Oxley Act (SOx), 88
Published audit reports
communication problems, 433
internal audit communications, 433
reporting internal audit results, 415
Purchased software internal controls audit checklist
internal audit procedures, 532

QA reviews of individual completed audits
internal audit quality assurance review procedures, 739
QIAL requirements
other CIA certifications, 693
Quality assurance auditing
American Society for Quality (ASQ), 717
ASQ standards, 717
classifications of quality audits, 719
Deming PDCA cycle, 724
duties and responsibilities of ASQ quality auditors, 719
internal audit quality assurance review elements, 730
internal audit quality assurance review procedures, 731
ISO 9000 standards, 723
Pareto chart example, 722
types of quality audits, 721
Quality assurance processes
launching an enterprise Six Sigma project, 752
Six Sigma concepts, 747
Quality assurance programs
internal audit attribute standards, 222
Quality assurance review approaches
internal audit quality assurance review procedures, 734
Quality assurance reviews of the internal audit function
internal audit processes, 727
Quality audit process steps
ASQ standards, 726
Quality management system processes
ISO 9001 quality management systems, 767
Quality review engagement memo
internal audit processes, 736
Quantitative risk analysis
risk management fundamentals, 150
risk monitoring, 152
risk ranking expected costs, 152
Questionnaire-based CSA reviews
CSA processes, 302
Questionnaire-type audit reports
audit report formats, 426

Radio frequency identification (RFID) privacy issues
online privacy and e-commerce issues, 570
Random number audit sample selection
statistical sampling plans, 248
Recommended sample sizes
section 404 compliance reviews, 116
Red book standards
Intentional Standards for the Professional Practice of Internal Auditing (IPPF), 218
Red flags
fraud detection and prevention, 658
internal audit fraud detection signs, 657
Release management
ITIL service support, 474
Relevant information
information and communication processes, 50
Replicated sampling
testing, assessing, and evaluating audit evidence, 268
Reporting audit results
internal audit processes, 360
Reporting internal audit results
audit report framework, 412
audit report key elements, 417
audit report negative and positive statement examples, 425
audit report preparation steps, 429
internal audit processes, 411
internal audit report objectives, 423
published audit reports, 415
Reporting the results of an internal audit quality assurance review
internal audit processes, 741
Residual risk
risk management fundamentals, 164
Review of a Six Sigma program
internal audit procedures, 759
Reviewing application management controls
IT application audit test procedures, 543
vendor-supplied software, 531
Reviews of compliance activities
internal audit processes, 678
Revised COSO framework
COSO internal control framework, 35
Risk appetite map
risk management fundamentals, 159
Risk assessment
COSO internal control framework, 40
Risk assessment analysis
probability and uncertainty, 148
risk management fundamentals, 148
Risk assessment principles
COSO internal control framework, 41
Risk encompassing the entire organization
entity-level risks, 174
Risk identification
risk management process steps, 144
Risk identification and analysis
COSO internal control framework, 41
Risk management fundamentals
enterprise risk management, 142
inherent risk, 163
legal and regulatory compliance risk objectives, 173
quantitative risk analysis, 150
residual risk, 164
risk appetite map, 159
risk assessment analysis, 148
risk objective setting components, 161
risk ranking, 149
Risk management process steps
risk identification, 144
Risk monitoring
quantitative risk analysis, 152
Risk objective setting components
risk management fundamentals, 161
Risk ranking
risk management fundamentals, 149
Risk ranking expected costs
quantitative risk analysis, 152

Risk response elements
COSO ERM, 165
Risk response strategies
COSO risk assessment, 44
Role of the CAE
establishing an internal audit function, 338

Sarbanes Oxley Act (SOx)
Public Company Accounting Oversight Board (PCAOB), 88
Sarbanes Oxley Act key provisions, 87
Sarbanes Oxley Act key provisions
Sarbanes Oxley Act (SOx), 87
Section 404: Management's Assessment of Internal Controls, 102
SOx Title II: Auditor Independence, 92
SOx Title III: Corporate Responsibility, 95
SOx Title IV: Enhanced Financial Disclosures, 100
Title V: Analyst Conflicts of Interest, 104
Title XI: Corporate Fraud Accountability, 107
Section 302 Officer Cortication
SOx Title III: Corporate Responsibility, 96
Section 404 Compliance Reviews
application control process areas, 115
AS5 auditing rules, 109
internal audit processes, 110
recommended sample sizes, 116
Section 404: Management's Assessment of Internal Controls
financial officer codes of ethics, 102
Sarbanes Oxley Act key provisions, 102
Selecting technology controls
COSO internal control principles, 73
IT control hierarchy, 73
Self-assessment functions
definition of internal auditing, 7
Service delivery best practices
ITIL framework, 475
Service level agreements (SLAs)
business continuity planning (BCP), 603
service level management, 476
Service level management
ITIL service delivery, 475
service level agreements (SLAs), 476
Service quality management
ISO 2000, 771
Seventeen COSO principles
COSO internal control principles, 60
Significance of internal auditing
common body of knowledge (CBOK), 3
Significant findings audit committee report
chief audit executive appointment, 624
SIPOC analysis
Six Sigma concepts, 753
Six Sigma concepts
define-measure-analyze-improve-control model, 747
DMAIC model, 747
DMAIC procedures, 756
Lean Six Sigma, 754
quality assurance processes, 747
SIPOC analysis, 753
Six Sigma deployment and process goal, 749
supplier-inputs-process-outputs-customer (SIPOC) charts, 754

Six Sigma and Lean techniques
ASQ quality assurance processes, 746
internal audit procedures, 756
internal audit processes, 746
Six Sigma deployment and process goal
Six Sigma concepts, 749
Six Sigma leadership roles
Black Belt Body of Knowledge, 751
Small business IT systems
auditing IT general controls, 449
general controls internal audit objectives, 453
Small business IT systems characteristics
client-server system configuration, 446
internal control concerns, 449
IT systems general controls, 444
operations IT internal controls, 447
system program library controls, 451
Social engineering IT risks
internal control security risks, 568
Social media computing risks
enterprise social media policy, 501
Social media example
Facebook, 494
LinkedIn, 497
Twitter, 498
Social media internal audit issues
internal audit procedures, 492, 504
SOx knowledge and understanding
CBOK knowledge requirements, 16
SOx legal compliance. *See* COSO internal control framework
SOx requirements
COSO internal control framework, 29
SOx requirements
audit committee financial expert, 617
audit workpapers retention, 90
SOx Section 302
corporate responsibility for financial reports, 96
SOx Section 404 internal control reviews
audit universe concepts, 323
SOx Title II: Auditor Independence
Sarbanes Oxley Act key provisions, 92
SOx Title III: Corporate Responsibility
audit committee governance rules, 95
Sarbanes Oxley Act key provisions, 95
Section 302 officer cortication, 96
SOx Title IV: Enhanced Financial Disclosures
Sarbanes Oxley Act key provisions, 100
SOx whistleblower
internal audit processes, 646
Stakeholder ethics attitude surveys
enterprise ethics functions, 635
Standard deviations
statistical audit sampling measures, 244
Statistical audit sampling
testing, assessing, and evaluating audit evidence, 241
Statistical audit sampling measures
standard deviations, 244
Statistical sampling
testing, assessing, and evaluating audit evidence, 238
Statistical sampling plans
attributes sampling size examples, 257
cluster selection audit sample selection, 251
interval selection audit sample selection, 250
random number audit sample selection, 248

stratified selection audit sample selection, 250
testing, assessing, and evaluating audit evidence, 247
Steps to building a BCP
BCP enterprise training, 602
business continuity planning (BCP), 590
Strategic decisions
launching an internal audit internal consulting capability, 705
Stratified selection audit sample selection
statistical sampling plans, 250
Supplier-inputs-process-outputs-customer (SIPOC) charts
Six Sigma concepts, 754
System firewall controls
IT network security fundamentals, 566
System program library controls
small IT business systems characteristics, 451

Target corporation security breach
IT security threats, 562
Testing audit control objectives
performing applications controls reviews, 541
Testing skills competencies
internal audit key competencies, 356
Testing, assessing, and evaluating audit evidence
attributes sampling procedures, 252
audit sampling, 236
Bayesian sampling, 268
continuous assurance auditing, 275
judgmental sampling, 239
monetary unit sampling, 264
multistage sampling, 267
replicated sampling, 268
statistical audit sampling, 241
statistical sampling, 238
statistical sampling plans, 247
XBRL extensible marking language, 291
XBRL interoperability concepts, 291
Tests of compliance
performing applications controls reviews, 548
Three components of internal control
internal control principles, 33
Tick marks
documenting audit results, 406
Title V: analyst conflicts of interest
Sarbanes Oxley Act key provisions, 104
Title XI: corporate fraud accountability
Sarbanes Oxley Act key provisions, 107
Tone at the top
control environment, 40
Transaction control activities
internal control activities, 48
Transaction controls
COSO internal control framework, 46
Travel audit workpaper example
internal audit workpapers, 404
Treadway commission report
fraudulent financial reporting, 660
Twitter
social media example, 498
Types of enterprise business risks
COSO risk assessment, 43
Types of quality audits
quality assurance auditing, 721

U.S. Federal Privacy Protection Laws
opt-out rights, 572
PCI DSS fundamentals, 579
Understanding and recognizing fraud
internal audit processes, 655
Value of CIA specialty certifications
internal auditor professional certifications, 693
Vendor-supplied software
reviewing application management controls, 531
Viruses and malicious program code
IT network security fundamentals, 565

Whistleblower call centers
enterprise governance processes, 648
Whistleblower programs
audit committee responsibilities, 625
enterprise governance processes, 643
Workflow description process flowchart
documenting audit results, 394
Workpaper auditor tick marks examples
documenting audit results, 406
Workpaper document organization
administrative files, 402
audit procedure files, 402
permanent files, 401
workpaper formats, 400
Workpaper formats
workpaper document organization, 400
Workpaper objectives
internal audit workpapers, 397
Workpaper point sheets
documenting audit results, 404
Workpaper preparation techniques
internal audit workpapers, 405
Workpaper review processes
internal audit workpapers, 407
Workpaper security
internal audit department privacy and security, 582
Workpaper standards
planning audits, 398
Worldwide internal audit standards
ISO, 762
Wrapping up an internal audit
preliminary findings point sheet, 385

XBRL interoperability concepts
testing, assessing, and evaluating audit evidence, 291
XBRL extensible marking language
testing, assessing, and evaluating audit evidence, 291