## Index

absenteeism rates 325-7, 401-4, 425-7 access controls 43-4, 57-74, 136-7, 242-3, 273-4, 282-3, 372-5, 380-2, 392-5, 401-7, 453-62, 481-8, 489-92, 497-501, 504-10, 514-23, 527-41, 542-53, 555-69, 573-9, 585-9, 613-15, 620-6, 636-44, 661-6, 667-70, 680-7, 704-6, 763-834, 842-3 see also data protection...; security data protection 620-6, 631-2, 639-44, 848 data transfers and sharing 515-23, 542-53, 636-44, 704-6,850 freedom of information 479-88, 497-501, 503-10, 516-23, 525-41, 581-4, 590-1, 627-35, 646-7, 763-834, 848-9 hacking 646, 671–9 human resource information security 661-6, 667 70. 841 - 2information security incidents 487, 520-3, 671-9, 841 - 2Internet 599-604, 842-3 life-cycle issues 661-6 logging systems 487, 576-9, 528-9, 667-70 physical security 555-8, 638-44, 661-6, 667-70, 849 records management 527-41, 680-7, 849 remote working 585-9, 844 rights and responsibilities 661-6 spreadsheets 704-6 system access controls 8, 487, 576-9, 661-6, 707-9 updated access rights 662-6 user-screening processes 662-6, 667-70, 694-5 verification tasks 662-6 access key devices 555-8 accessibility aspects of information management 515-23 accountabilities 33-4, 78, 84, 85-94, 100-15, 282-3. 448-50, 464-75, 493-5, 535-41, 559-61 accountancy profession 17 accounting controls see finance and accounting accounts payable see also creditors; purchasing concepts 7, 11, 28-9, 33, 42, 45, 51, 240, 246-8, 436, 713 control objectives 246

risk/control questions 246 - 8accounts receivable see also debtors; order processing concepts 7, 33, 42 240, 248-51, 362, 372-5, 380-2, 713 control objectives 248 risk/control questions 249-51, 362 accruals 152–50 accurate information 57-74, 124-7, 242-51, 272-4, 283-9, 291-316, 493-5, 507-10, 514-23, 535-41, 559-61, 587-9, 600-4, 618-26, 705-6, 710-11,835 action plans 71-4, 206, 212, 489-92 activators, systems concepts 131-5 activities categories of organisational activities 6-12 control activities 117-46, 147-50, 157-8, 164-77 actuals sales performance and monitoring 359-62 three Es (effectiveness, efficiency, and economy) 15-16, 19-23, 219-35 ad hoc internal requests, data transfer types 636, 638-9 adaptive control systems 133-5 added value 21-3, 76, 211-12, 219-35, 364-6, 370-1, 391 - 2see also value ... added value (cont.) CSAs 211-12 definitions 22 operational auditing 21-3, 76, 211-12, 219-35, 364-6, 370-1, 391-2 additional voluntary contributions (AVCs) 419 administrative controls, concepts 3, 6–7, 117 advertising see promotion and advertising affiliates 158, 177 Afghanistan 729, 764 after sales support 5-6, 8, 43, 126-7, 343-4, 348, 350, 366, 375-82, 389-92, 714-15, 724 see also maintenance and servicing; marketing and sales; spare parts...; warranty arrangements concepts 8, 343-4, 375-82, 389-92, 714-15, 724 control objectives 375-6, 377-8, 380-1, 389 risk/control questions 376-7, 378-80, 381-2, 389-92

after sales support (cont.) SAPG 714-15, 724 agents 8, 343, 350, 351-3, 362, 368-71, 404-7, 714 concepts 350, 351-3, 362, 368-71 conflicts of interest 369-71 control objectives 368-9 remuneration 368-71 responsibilities 369-71 risk/control questions 369-71 AGMs 93 AICPA 116-18 air conditioning systems, systems concepts 130-5 Albania 729, 764 allowances, taxation 264-6 annual reports 92-4, 117, 151-77, 251-3, 710-11 see also Sarbanes-Oxley Act 2002 anonymous voting systems 205, 207-8 anti-discrimination laws 406-7, 594-5 appendices 616, 712-851 Apple Corporation 570-1 appointments, auditors 17, 176 approval issues boards of directors 17, 73-4, 164, 166, 211 lists of contractors 9, 290, 297-9, 316 archives 514-23, 538-41, 680-7, 835 Argentina 730, 765 Armenia 730, 765 ARPANET 598 Ashby's cybernetics law of requisite variety 131-5 asset management 481-8, 710-11 asset registers 497, 502-10, 515-23, 527-41, 556 681-7, 700-1, 710-11, 847, 850 assets see also hardware...; information...; software... fixed assets (and capital charges) 7, 240, 253-6, 432-6, 447, 502, 710-11 risk management 3, 5-6, 10, 17, 22, 25, 29-30, 36-7, 40, 41-74, 76-94, 95, 115, 143-5 assurance issues 8, 17-19, 22, 76, 82-4, 100, 115, 117-46, 171-3, 182-7, 212, 214-35, 240-75, 286-9, 306-10, 314-16, 318, 319-42, 345-81, 468-75, 714, 721 see also quality assurance... boards of directors 82-4 resourcing decisions 17-19, 232-5 ATMs 10 attachments, emails 593-7, 691-3 audit approaches to operational auditing 12-16 audit committees 32-3, 82-4, 86-7, 88-90, 114, 127-8, 143-5, 153-77, 211-12, 214-35 see also boards of directors chief audit executives 82-4, 143-5, 232-3 complaints 160 CSAs 211-12 financial experts 158-62, 172-3 monitoring functions 127-8, 143-5, 158-77 responsibilities 158-73, 176-7, 211, 214-35 Sarbanes-Oxley Act 2002 153-77 statutory requirements 158-60

audit findings 13-14 audit logs see logging systems audit reports 13-14, 200-1, 218, 226-35 audit review programmes, joint ventures 283 audit trails, concepts 35, 36, 168-70, 247-8 audit universes business processes 27-39, 41, 240 concepts 6, 9, 11, 27-39, 41, 290 contracting 9, 290 hybrid audit universe 30 audit visits 45, 277-84 auditors appointments 17, 176 credibility issues 11-12, 16-18 knowledge/skills/competencies requirements 16-18, 86-7, 158-60, 218, 233-4 recruitment issues 17, 176 remuneration 176, 233 technical activities 16-19 Australia 534, 581, 685, 730, 765-6 Austria 731, 767 authority to make organisational commitments 136-7, 147-50, 123-5, 203-4, 208-13, 550-3, 554-8 automated controls 130-5, 195-8 back-up and media management 8, 43-4, 67-74, 486, 497-501, 505-10, 521-3, 537-41, 558, 562-5, 584, 658–60, 846 concepts 562-5, 584, 588-9, 846 control objectives 563 procedures 563-5, 846 risk/control questions 563-5 BACS 245, 261, 487, 696-8 bad debts 33, 249-51 BAE 97-8 balance sheets 54, 67-74 bank account reconciliations 258-61 bank accounts and banking arrangements concepts 7, 240, 258-61, 283, 713 control objectives 258-9 risk/control questions 259-61 banks 29, 42, 51, 97-8, 283 Barbados 731, 768-9 batch processing 559-61 Belarus 731, 769 Belgium 732, 770 benchmarking, concepts 16, 23-4, 92, 172-3, 349-50, 354 Bermuda 732-3, 770-1 BERR 481, 585, 590-1, 599, 658, 671-2, 691, 851 'best' row in control matrices 58-74 bibliography 852-7 Blair, Tony 151 boards of directors 4-5, 9-10, 12-14, 17, 32, 44, 73-4, 75-94, 102-8, 112-15, 117-46, 147-50, 153-77, 211-12, 215-35, 470, 524-41, 552-3 see also audit committees approval requirements 17, 73-4, 164, 166, 211 assurance vacuums 82-4

committees 32-3, 82-4, 86-7, 88-90, 93, 114 corporate governance 81-94, 176-7, 470 CSAs 211-12 direction-setting objectives 81-2, 87-8, 147-50 internal controls 117-46, 151-77, 470 objectives 81-4, 87-90, 112-15, 117-46, 147-50, 176-7, 470, 552-3 organisational objectives 81-2, 87-90, 112-15 risk management 102-8, 112-15, 470 risk registers 107-8, 115 bomb threats 556-8 Bosnia and Herzegovina 733, 771-2 'both' row in control matrices 58-74 Botswana 733, 772-3 bottom-round management, concepts 196-8 bought-in expertise, technical activities 17-18 boundaries, systems concepts 131-5 BPR see business process re-engineering brainstorming sessions 57, 106-7, 183, 207-8 Brazil 733, 774 break-even points 269-70 breakdown services, company vehicles 435-6 bribery 84-5 British Petroleum (BP) 17-18, 199 British Security Industry Association (BSIA) 684 British Standards Institute (BSI) 182, 183–4, 466–7, 480-8, 526 see also ISO... background information 182, 183-4, 466-7, 480, 526 BS 4783 526 BS 5454 526 BS 7499 555 BS 7750 467 BS 7799 480-1, 526 BS 8555 466-7, 475 BS 15000 483 BS EN 15713 684 DISC PD0010 526 DISC PD0012 526 'budget/actual comparisons', operational auditing evaluations 223-33 budgeting and monitoring 7, 51, 71-4, 223-35, 240, 256-8, 268-70, 276-84, 287-9, 293-316, 351-3, 388-92, 406-7, 413-15, 442-5, 490-2, 652-4, 710-11, 713 control objectives 256, 443-5 IT accounting 710-11 risk/control questions 257-8, 443-5 buildings IT sites and infrastructure 555-8, 658-60, 681-7, 843 portable buildings 111 builds of software, concepts 571-5 Bulgaria 734, 774-5 business continuity plans (BCPs) 497-501, 521-3, 846-7 see also contingency plans business cycles, concepts 32-5, 240 business management techniques

see also delayering...; empowerment...; outsourcing...; quality assurance... concepts 178 - 98JIT 178, 195-8 business plans 282-3 business process re-engineering (BPR), concepts 178-81, 188-90, 199 business processes concepts 3-4, 27-39, 41, 116-46, 167-73, 178-81, 199-213, 240, 712-28, 837 contracting 32 CSAs 30, 199-213 definitions 32-5, 837 hallmarks of robust business processes 36, 141-2, 507-10, 521-3, 587-9 identification approaches 32-5 lists 32-5 SAPGs 35-6, 712-28 Sarbanes-Oxley Act 2002 167–73 university case study 37-9 weaknesses 30-2 Cadbury, Sir Adrian 116 CAE 13, 18 'calculated risk score' row in control matrices 58-74 cannus area networks (CANs) 609 Canada 117, 129–30, 154, 199, 685, 734–7, 775–81 see also CoCo capacity management 486, 497, 511-13, 520-3, 715, 725, 846 control objectives 512 definition 511–12 risk/control questions 512-13 Cape Verde 737-8, 781 capital expenditure, hardware assets 502, 713, 721 carbon trading 464-5 cash 7, 11, 32-6, 42, 54, 135-6, 240, 245-6, 258-61, 270-2, 274-5, 720-8 see also petty cash... cash flow management 33-4 Cayman Islands 738, 781–2 CCTV 554-5, 673 CDs 497, 533, 566-7, 637, 672 CEOs 97-8, 117, 128-9, 163-77, 229, 232 - 3**CERN 598** certification requirements CSAs 200 Sarbanes-Oxley Act 2002 151-77 Certified Internal Auditors (CIAs) 204 CFOs 117, 128-9, 163-77 change management 497-501, 506-7, 520-3, 547-53, 605-8,845-6 CHAPS 261 Chartered Institute of Public Finance and Accountancy (CIPFA) 228-30 Charters, operational auditing 217-35 cheques 259-61 chief accountants 4, 58, 69, 164–77

chief audit executives 18-19, 82-4, 143-5, 171, 216-35, 470 audit committees 82-4, 143-5, 232-3 'for pay and rations' reports 83-4 resourcing considerations 18-19, 232-3 Chile 738, 782 China 581, 739, 782-3 CIAs see Certified Internal Auditors CIPFA see Chartered Institute of Public Finance and Accountancy classifications of organisational activities, concepts 6 - 12cleaning firms, outsourcing considerations 192, 193 'clear desk' policies 539-40, 840-1 clearing banks 29 clients 13-14, 222-35 see also customer... closed systems, concepts 131-5 CoCo internal control framework 117-18, 129-30, 141-3, 144, 157-8, 208-10 see also Canada Codes of Conduct, ethics 148-9, 161-3, 172, 215-35 collection aspects data protection 618-26 information asset registers 505-6, 847 information management 515-23, 542-53, 618-26 collusion, fraud 149-50 colour codes and numeric scores, risk matrices 104-6 comfort letters 164 commitment factors 136-7, 147-50, 183-5, 203-4, 208-13, 550-3, 554-8 Committee of Sponsoring Organizations (COSO) 4-3, 15, 75-81, 96-9, 103, 111, 115, 117-28, 140 142, 144, 147-50, 157-77 Common Law Duty of Confidence 640 communications 17–18, 20, 28–9, 78, 81–4, 85–7, 89-94, 99-115, 120-1, 124-7, 196-8, 208-13, 234, 277-84, 366-8, 430-2, 427, 489-92, 497, 515-23, 542-53, 554-8, 581-4, 590-7, 840 emails 487, 497, 520–3, 581–4, 590–7, 691–3, 841 JIT coordination 196-8 knowledge management 542-53 labour relations 430–2 sharing aspects of information management 515-23, 542-53, 636-44 subsidiaries/joint ventures 277-84, 366-8 Communities of Practice (CoPs) 547 Companies Act 2006 464, 473-5 company vehicles 7, 399, 432-6, 556-8, 714 control objectives 433 risk/control questions 433-6 comparators, systems concepts 130-5 competencies 9, 16-18, 84-5, 122, 129-30, 147-50, 158-77, 208-13, 290, 295-7 competitive advantages 71-4, 279-80, 344-55, 362-6, 368-9, 388-92, 411-13, 468-75, 489-92 competitive disadvantages 57-74 complaints 126-7, 160, 350, 356-7, 362, 406 - 7

completeness of information flows 14, 124-7, 168-73, 272-4, 283-9, 291-316, 507-10, 515-23, 535-41, 559-61, 587-9, 705-6, 710-11, 835 compliance issues 4-5, 46-50, 55, 60-74, 77-94, 96-115, 117-46, 151-77, 202, 226-35, 242-75, 291-316, 319-42, 400-36, 439-52, 463-75, 479-88, 496-501, 514-41, 616-35, 640-4, 665-6, 707-11, 713-14, 721, 835 see also legislation; regulations 'compliance testing' column of SAPG risk/control section 48-50 Computer Misuse Act 1990 581, 646 concealed risks 107-10 confidentiality 57-74, 124-7, 220-1, 242-3, 272-4, 299-302, 345-8, 351-5, 401-7, 438-42, 453-62, 503-10, 515-23, 533-41, 560-1, 566-9, 586-9, 592-7, 637-44, 663-6, 671-9, 680-7, 688-90, 700-6, 729-62 configuration management database (CMDB) 572 conflicts of interest agents 369-71 distributors 362-6, 389-92 ethics 162-4 consistency of information flows 14, 124-7, 272-4, 705-6 consulting roles 100, 115, 180–1, 212, 232, 542 contingency plans 43-4, 69-74, 91, 103, 368, 397-8, 453-62, 487, 497-501, 512-13, 528-41, 561, 658-60, 671-9, 689-90, 707-9, 846-7 see also business continuity plans concepts 658-60, 689-90 control objectives 658-9 risk/control questions 659-60 security 453-62, 528-41, 658-60 subsidiaries 368 tests 658-60, 689-90 continuous improvements 16, 77-80, 91-4, 140-1, 179-81, 182-7, 210-13, 315-16, 466-7 see also total quality management contract management environment concepts 9, 290-5 control objectives 291-2 risk/control questions 292-5 contracting 6, 7, 9, 22-3, 32, 44, 143-5, 191-5, 220-1, 234, 285, 289-316, 385-92, 648-50, 655-7, 683-7, 716-17, 727-8 see also outsourcing...; procurement; tendering approved lists of contractors 9, 290, 297–9, 316 audit universes 9, 290 business processes 32 concepts 285, 385-92, 648-50, 655-7, 683-7, 716-17, 727-8 control objectives 291-316, 388-9, 655 costs and benefits analysis 291-316, 648-50, 655-7 definition 289-90 disposal of records 683-7 documentation 300-1, 302-10, 314-16 final accounts 9, 290, 310-13 insurance cover 296, 389–92

interim payments 9, 44, 290, 308-13 overview of audit universes 9, 290 performance/productivity measurement systems 9, 290, 306-8, 313-16, 385-92 reviews of project outturn/performance 313-16 risk/control questions 292-316, 649-50, 656-7 SAPG 716–17, 727–8 selection and letting issues 9, 290, 304-6 viability/competence assessments of contractors 9, 290, 295-7 contracts of employment 405-7, 441-2 control activities concepts 117-46, 147-50, 157-8, 164-77, 207-13, 281-4, 707-9 dimensions 123-4 joint ventures 281–4 'control activities' component, COSO internal control framework 120-1, 123-4, 142, 144, 147-50, 157-8, 164-77 'control environment' component, COSO internal control framework 120-2, 147-50, 157-77 control environments 120-2, 147-50, 152-77, 453-5, 712-13, 721 control matrices see also inherent risk concepts 40, 53-4, 56-74 examples 56-74 MISs 56-74 planning 64, 71-4 control registers, Sarbanes-Oxley Act 2002 168 173 control self assessments (CSAs) see also standard audit programme guides action plans 206, 212 anonymous voting systems 205, 207 + 8audit committees 211-12 business processes 30, 199-213 CoCo internal control framework 208 - 10concepts 18-19, 30, 41, 102-3, 128, 199-213, 718 control objectives 210-12 costs and benefits analysis 202-4, 205-6, 211-12 critique 205-6 definition 18-19, 41, 199-200 hybrid approaches 206-7 IIA CCSA programme 204, 210 management commitment needs 202-3 negative perspectives 202-3 origins 199 questions 208-12 readings 210 reassurance aspects 206 responsibilities 200-2 suitable focus areas 200-1 top-down commitment 203-4 training 204-5, 212 Word tables 206 workshop/survey approaches 200-1, 204 - 12control systems, concepts 130-5

control-effectiveness measurements 54-6, 57-74, 78, 84, 85, 127-8, 141-3, 151-77, 209-13, 219-35 control-risk self assessments see control self assessments controls, concepts 116-46 conversion business process, concepts 720-8 Coopers & Lybrand 118 coordinated sections within businesses 3–26, 27–39, 78-94, 116, 118-20, 196-8, 200-1, 218 Copyright Designs and Patents Act 1988 581, 646 core/non-core activities, outsourcing considerations 193-4, 195 corporate framework business process, concepts 34-5, 720 - 8corporate governance 3, 5–6, 9–10, 17, 22, 25–6, 29-30, 34, 44, 75-94, 176-7, 205, 232-5, 470-5, 509-10, 718, 836 best practices 93, 228-30 boards of directors 81-94, 176-7, 470 communications 78, 81-4, 85-7, 89-94 concepts 75-94, 175-7, 205, 470-5, 509-10, 718, 836 external governance processes 75, 81-4, 90-4, 116 internal controls 76-94 internal governance processes 78, 81–2, 84–7 international conflicts of standards 176-7 objectives 77–94 risk management 76–94, 110 SAPG 718 stakeholders 75-82, 90-4 corporate memory, concepts 545-53 corporate social responsibilities 16, 21, 91-4, 463-75 corrective category of control 139, 168-70 corrective control systems 135 corrupted data 57-74 COSO see Committee of Sponsoring Organizations costing methods 268–70, 321, 345–8, 354–5, 438–42, 445-50, 710-11, 720-8 costs and benefits analyses 151, 154-5, 171-2, 183-5, 188-9, 192-4, 197-8, 202-4, 205-6, 211-12, 219-35, 286-9, 291-316, 327-30, 349-50, 360-2, 411-13, 442-5, 460-2, 466-75, 507-10, 648-50, 651-7 see also budget... CRB see Criminal Records Bureau credibility issues, auditors 11-12, 16-18 credit cards 272 credit notes 249-51 credit-granting business process 32-3, 136, 138, 194, 249-51, 371-5 see also order processing creditors 33-4, 91-4, 242-3, 246-8 see also accounts payable creditworthiness appraisals 249-51 Criminal Justice and Public Order Act 1994 617 Criminal Records Bureau (CRB) 663, 665-6, 841 - 2criminal sanctions data protection 617-18, 625-6 Sarbanes-Oxley Act 2002 152–4, 164–77

crisis response plans 91, 494-5, 497-501, 536-41, 556-8, 658-60, 671-9, 707-9, 842, 847 Croatia 740, 784 CSAs see control self assessments cultural issues 29-30, 34, 57-8, 85-6, 110, 115, 121-2, 183-7, 220-1, 277-84, 496-501, 532-41, 547-53, 598, 678-9, 840 JIT 196 joint ventures 280-1 knowledge management 547-53, 849-50 outsourcing considerations 192, 193, 220-1 quality assurance systems 183-7 subsidiaries 277-84, 366-8 'current control/measure' column of SAPG risk/control section 48-50 customer-focused marketing 344, 348-50, 356-9, 369 customers 91-4, 126-7, 180-1, 222-5, 344-82 after sales support 5-6, 8, 43, 126-7, 343-4, 348, 350, 366, 375-82 complaints 126-7, 350, 356-7, 362 credit-granting business process 32-3, 136, 138, 194, 249-51, 371-5 requirements 344-50, 388-92 Customs and Excise (C&E) 262-3, 622 cybernetics 130-5 cycles concepts 27-39, 372-5, 468-75, 544-5, 547-9, 661-6, 680-7 definition 32 university case study 37-9 Cyprus 740, 784–5 Czech Republic 740, 785 damage or distress to data subjects situations data protection 617, 620, 625, 835 data controllers, data protection 617-26, 729-62, 835 data definitions 542-5, 835-6 see also knowledge... data protection 9, 43–4, 404–7, 479–88, 496–501, 503-10, 514-23, 525-41, 562-5, 581-4, 590-7, 616-26, 631-2, 639-44, 646-7, 700-6, 729-62, 835, 842, 848 see also access...; sensitive... access requests 619-26 concepts 479-88, 514-23, 525-41, 581-4, 590-1, 616-26, 631-2, 639-44, 646-7, 700-6, 729-62, 835, 842, 848 control objectives 625 criminal sanctions 617-18, 625-6 damage or distress to data subjects situations 617, 620, 625, 835 errors 617, 620, 625, 626, 848 exemptions 621, 624 international legislation 616, 729-62, 848 objectives 617 principles 618-26, 631-2, 639-41, 848 processes 619-26 risk/control questions 625-6 time limits 620, 625

Data Protection Act 1998 616-26, 639-44, 646, 759-60, 835, 838, 842, 848 data retention and disposal 487, 497, 524-41, 562-5, 620-6, 638-44, 680-7, 836, 851 see also disposal...; retention... concepts 680-7, 836, 851 control objectives 685 life-cycle issues 680-7 risk/control questions 685-7 standards 684-5 data subjects, data protection 617-26, 642, 729-62, 835 data transfers and sharing 487, 497, 515–23, 542–53, 636-44, 688-90, 704-6, 850 ad hoc internal requests 636, 638-9 concepts 636-44, 688-90, 704-6, 850 control objectives 642, 688-9 exemptions/exceptions 637-8 ISAs 639-44 regular transfers with external parties 636-7, 639-44 risk/control question 643-4, 689-90 types 636-8 databases 9, 43, 57-74, 136-7, 487, 502-10, 544-53, 613-15 see also information asset registers concepts 613-15 control objectives 613–15 rist/control questions 614–15 left collectors 194 debtors 33, 194, 248-51, 371-5, 378-82 see also accounts receivable; order processing delayering considerations, concepts 178, 187-9 Denmark 740, 785 depreciation 253-6, 434-6 detailed issues, SAPG questions 46-50 detective category of control 138-9, 144, 168-70 detectors, systems concepts 130-5 developing world, environmental issues 465-6 development project management 8, 437, 447–50, 715 control objectives 447-8 definition 447 risk/control questions 448-50 digital cameras 567 digital preservation concepts 531, 532-41, 681-7 definition 532 direct marketing, data protection 620 directive category of control 138 directors 4-5, 9-14, 17, 32, 44, 73-4, 75-94, 102-3, 107-8, 112-15, 117-46, 147-50, 153-77, 211-12, 215-35, 464, 470, 524-41 see also boards... disaster recovery plans (DRPs) 91, 494-5, 497-501, 536-41, 556-8, 563-5, 574-5, 658-60, 671-9, 707-9, 842, 847 disciplinary/grievance procedures 7, 85, 149, 399, 400-4, 424-7, 594-7, 604, 641-4 concepts 424-7, 594-7, 604 control objectives 425 risk/control questions 425-7, 597, 604

disclosures information management 515-23 Sarbanes-Oxley Act 2002 151-77 discount policies see pricing and discount policies discussion boards 600-4 disposals 433-6, 447, 487, 497, 505-6, 514-23, 524-41, 562-5, 620-6, 638-44, 680-7, 836, 851 company vehicles 433-6 control objectives 685 information asset registers 505-6, 515-23, 681-7 R&D equipment 447 records management 527-41, 680-7, 849, 851 removable media 567-9 resurrected deleted files 562, 567, 682-7, 851 risk/control questions 685-7 standards 684-5 dissemination see sharing... distribution see also logistics; stock...; transport; warehousing... concepts 7-8, 383-98, 714 control objectives 384-98 insurance cover 385-98 operational auditing 7-8, 383-98 overview 383-4 risk/control questions 384-98 distributors 3, 8, 33, 35, 42-3, 343, 362-6, 382, 383, 388-92, 714 concepts 362-6, 382, 383, 388-92 conflicts of interest 362-6, 389-92 control objectives 362-3, 388-9 definition 362, 388 performance/productivity measurement systems 362-6, 388-92 risk/control questions 363-6, 389-92 diversity issues 16, 21, 84–5, 93, 406–7, 594–7 see also anti-discrimination...; equal opportunity...; equity... boards of directors 93 three Es of equity, environment, and ethics, concepts 16, 21, 84-5, 93 division-with-supervision opportunities, internal controls 135-7, 142-3, 150 documentation 36-7, 40-74, 167-73, 182-7, 197-8, 218, 241-3, 262-3, 272-5, 286-9, 291-316, 335-42, 375-82, 411-13, 443-5, 494-5, 535-41, 544-53, 606-8, 652-4, 681-7, 695, 701-6, 712-28, 839-51 see also standard audit programme guides drivers, definition 571 Drucker, P.F. 111 due diligence 87-8 DVDs 497, 566-7, 637 Eastern Europe 280-1 economy issues concepts 4, 15-16, 19-23, 29-30, 77-9, 219-35, 319-42

performance/productivity measurement systems 19-23, 219-35, 319-42

three Es (effectiveness, efficiency, and economy) 15-16, 19-23, 29-30, 219-35 EDI see electronic data interchange EDMS see electronic document management systems 'effective yes/no' column of SAPG risk/control section 48 - 50effectiveness issues concepts 4-5, 15-16, 19-23, 29-30, 54-6, 76, 78, 84, 85, 88-9, 95-115, 117-46, 209-13, 219-35, 313-16, 319-42, 352-3, 557-8, 612 control-effectiveness measurements 54-6, 78, 84, 85, 127-8, 141-3, 151-77, 209-13, 219-35 corporate governance 78, 84, 85, 88–9 performance/productivity measurement systems 19-23, 78, 84, 85, 219-35, 313-16, 319-42 three Es (effectiveness, efficiency, and economy) 15-16, 19-23, 29-30, 117-46, 215-35 efficiency issues concepts 4-5, 15-16, 19-23, 29-30, 77-9, 95-115, 117-46, 215-35, 319-42, 595-7 performance/productivity measurement systems 19-23, 219-35, 319-42 personnel 15-16 three E: (effectiveness, efficiency, and economy) (15-16, 19-23, 29-30, 117-46, 215-35) Electronic Communications Act 2000 581, 646 electronic data interchange (EDI) 43-4, 198, 248-50, 487, 688-90 control objectives 688-9 risk/control questions 689-90 electronic document management systems (EDMS) 531 electronic funds transfers 242-5, 259-61, 487, 696-8 electronic records, types of records 496-7, 502-3, 524-41, 545-53, 566-9, 622-6, 631-2, 681-2, 712 - 28emails 487, 497, 520-3, 581-4, 590-7, 646, 691-3, 841 see also information technology attachments 593-7, 691-3 concepts 590-7, 691-3, 841 control objectives 595-6 policies 591-7, 841 Regulation of Investigatory Powers Act 2000 581, 592, 646 risk/control questions 596-7 spam 590-7, 602, 707-9 standard formats 593-7 statistics 590-1 viruses 691-3, 841 embedded microchips 567 emergency/evacuation drills 428-30, 455-62, 556-8 see also disaster... empowerment considerations, concepts 178, 188, 189-91, 195-6, 211-12 encrypted data 566-9, 610-12, 638-44, 646, 673, 845 energy see materials and energy Enterprise Risk Management framework (COSO) 75-6, 96-115, 119, 120-1, 140, 157-8 environmental auditing, concepts 465-75

Environmental Information Regulations 2004 526, 646 environmental issues 8, 16, 41, 42–3, 219–35, 318, 335-8, 463-75, 713-14, 721 assessments 468-9 control objectives 335-6, 465, 471 developing world 465-6 EMAS 464, 466-70, 475 emergence of concerns 465-6 example programmes 470-5 experts 469-70 hazardous materials 332-8, 395-8, 428-30, 457-60, 463-75, 554-8 legislation 463–75 physical security 332-5, 428-30, 454-62, 495, 496-501, 520-3, 554-8, 588-9, 638-44, 849 production/manufacturing 8, 318, 335-8 responsibilities 463-75 risk/control questions 336-8, 465, 471-5 strategic objectives 467-8 supply chains 468-75 sustainability reports 470-5 systems concepts 131-5 three Es of equity, environment, and ethics 16, 21, 84-5, 463-75 waste management 335-8 equal opportunity laws 406-7 equity issues see also diversity... three Es of equity, environment, and ethics 16, 21, 84-5 errors data protection 617, 620, 625, 626 keying errors 57-74, 699-700 spreadsheets 699-700, 702 estates management 430, 712-13 estimates 158-60 Estonia 741, 786-7 ethics 16, 34, 78, 84–5, 121–2, 147–50, 161–3, 172–3, 209-13, 215-35, 288-9, 415-22, 437, 464-75, 594 - 7Codes of Conduct 148-9, 161-3, 172, 215-35 conflicts of interest 162-4 environmental issues 464-75 management 147-50, 161-3, 172-3, 209-13 pension schemes 415-22 questions 147-50, 172 research and development 437 Sarbanes-Oxley Act 2002 161-3, 172 Ethiopia 742, 787 Europe see also individual countries contracts 300 data protection legislation 729, 742 digital preservation 535 freedom of information 627-8, 763 European Commission's Eco-Management and Audit Scheme (EMAS) 464, 466-70, 475 European Convention on Human Rights (ECHR) 628, 763

European Economic Area 621-6 European Union Directive on Data Protection (95/46/EU) 742 Excel 702-4 see also spreadsheets exemptions from VAT 263 expenditure business process, concepts 33-4, 36, 720-8 expenses 7, 11, 240, 270-2, 356-9, 433-6 control objectives 271, 356-9 petty cash and expenses 7, 240, 270–2 risk/control questions 271-2, 356-9 expert systems 9, 44 experts environmental issues 469-70 research and development 437-52 external auditors 151-77 external governance processes, concepts 75, 81-4, 90-4, 116 external hard drives 565-7 external reviews, operational auditing 214, 216-17 extranets 610 facilitation roles, operational auditing 201–6, 212 facilities management (FM) 9, 43-4, 192, 487, 648-50, 655-7 see also information technology; outsourcing... concepts 192, 648–50 control objectives 648-9 definition 192, 648 risk/control questions 649-50 facilities, plant and equipment see also maintenance concepts 8, 318, 319-24, 339-42, 427-30, 445-7, 457-60, 486, 554-8, 714 R&D equipment 8, 437, 445-7 fact-finding programmes 45, 277-8 failures 91, 141-3, 151-77, 315-16, 317-42, 375-82, 494-5, 497-501, 512-13, 523, 536-41, 556-8, 563-5, 574-5, 658-60, 671-9, 699-700, 707-9 Fayol, Henri 116, 118, 187-8, 198 feed system direct interfaces 57-74 feedback systems 130-5, 234, 350, 356-7, 362, 545-53 feedforward, systems concepts 132-5 fees 158-60, 164-77 FEI surveys 155 Fiji 742, 787-8 file headers 68-74 final accounts for contractors 9, 290, 310-13 finance and accounting accounting policies 710-11 concepts 3, 6, 7, 27, 32-5, 42, 117, 143-5, 192, 197-8, 239-75, 710-11, 713, 722 control objectives 240-75 cyclical definition 240 definition 117, 239-40 functional definition 240 IT accounting 710–11 JIT 197-8 management 239-75

overview of functions 7, 240 risk/control questions 240-75 SAPG 713, 722 system/function components 239-40 finance directors 4 financial controls 3, 143-5 financial experts, audit committees 158-62, 172-3 financial information and reporting concepts 7, 240, 272-4, 710-11, 713 control objectives 272-3 risk/control questions 273-4 standards 272-4, 710-11 financial institutions 10-11, 717 financial reporting, concepts 7, 34-5, 51, 117-46, 151-77, 240, 710-11, 720-8 Financial Services Authority (FSA) 672-3 financial statements 151-77, 251-3 Finland 742, 788 fire hazards 332-5, 428-30, 454-62, 554-8, 660 firewalls 707-9 fixed assets (and capital charges) concepts 7, 240, 253-6, 432-6, 447, 462, 502-3, 710-11, 713 control objectives 253-4 risk/control questions 254-6 fixed standard types of data transfers 636-44 floats, petty cash and expenses 271-2 flood risks 557 floppy disk drives 497, 575 flowcharts 48-50, 167-70 FoI see freedom of information 'for pay and rations' reports, chief audit executives 83-4 forecasts 15-16, 19-23, 219-35, 359-62 formal procedures, informal coalitions 31-2 France 154, 743, 788 fraud 47, 53–4, 57–8, 84–5, 142–4, 149–50, 153–77, 242-8, 259-61, 271-2, 291, 294, 315-16, 327, 355-9, 375, 377, 392-5, 397-8, 415-24, 434-6, 446-7, 453-62, 494-501, 523, 537-41, 554-8, 566-9, 580-4, 588-604, 661-79, 683-7, 696-700, 710-11, 840-51 categories 150 collusion 149-50 concepts 149-50, 153-77, 259-61 definition 149 'free-standing' context, SAPG uses 45 Freedom of Information Act 2000, UK 627-35, 640-1, 646, 832-3, 848-9 Freedom of Information Acts, US 833 freedom of information (FoI) 479-88, 497-501, 503-10, 516-23, 525-41, 581-4, 590-1, 627-35, 640-1, 646, 763-834, 848-9 concepts 627-35, 640-1, 763, 848-9 control objectives 632-3 definition 627, 763 exemptions 628, 630, 631-3 international legislation 627-8, 763-834, 848 objectives 628-9, 763

publication schemes 536-41, 628-35, 848-9 risk/control questions 633-5 terminology 631-2 time limits 630, 634 frequency issues, internal controls 169-70 Friedman, Milton 464 fuel cards, petty cash and expenses 272 functional approaches to defining the audit universe 3-26, 27, 30, 41-5, 240-75, 712-28 gateway PCs 611-12, 707-9 gathering see collection... GEC 97 general ledger/management accounts concepts 7, 28, 33-4, 42, 51, 240, 251-3, 462,713 control objectives 251 risk/control questions 252-3, 462 generally accepted accounting principles 158-60 Georgia 743, 789 Germany 170, 581, 744, 789–92 Ghana 744, 792 Gibraltar 744 792–3 global area networks (GANs) 609-12 global financial crisis from 2007 82-3, 219-20 gloudisation 344 good management practices operational auditing 228-30, 251-75, 699-706 spreadsheets 699-706 grant funding schemes, research and development 450 - 2Greece 744, 793-4 grievance procedures see disciplinary/grievance procedures gross risk see also inherent... concepts 101-15, 208-13 group loyalties/rivalries, process weaknesses 30-1 Guatemala 745, 794-5 Guernsey 745, 795 hacking 646, 671-9 hardware assets 502-10, 511-13, 554-8, 566-9, 580-9, 610-12, 648-50, 694-5, 710-11 see also removable media hazardous materials 332-8, 395-8, 428-30, 457-60, 463-75, 554-8 health checks, IT 487, 707-9 health insurance 7, 42, 399, 422-4, 713 see also pension schemes and other benefits concepts 422-4 control objectives 423 definition 422 risk/control questions 423-4 health and safety at work 7, 8, 42, 318, 319, 322-4, 332-5, 339, 399, 413-15, 427-30, 454, 457-60, 554-8, 682, 713 see also security; welfare... concepts 413-15, 427-30, 454, 457-60, 554-8

health and safety at work (cont.) control objectives 427-8, 457-8 risk/control questions 428-30, 458-60 health sector 10-11, 47, 717-18 hedging 243 Helpdesks 587, 594, 674-5, 694 - 5Herzberg's bipolar analysis of job satisfaction 190 high level review programmes, concepts 41, 45, 147-50, 278-9, 470-5 HMRC 622, 672–3 holiday/sickness payments 245 home loans 110, 194 Hong Kong 155, 745, 795-6 HR see human resource... Hubbard, Larry 207-10 human resource management 3, 5, 6, 7, 27-8, 103, 113, 121-2, 399-436, 661-6, 713-14 see also personnel concepts 7, 399-436, 661-6 control objectives 399-436, 664 definition 399 information security 661-6, 841-2 operational auditing 399-436 overview 399 risk/control questions 399-436, 665-6 human resources department 7, 399, 400-4, 661-6, 713-14 concepts 400-4, 661-6 control objectives 400-1, 664 definition 400 risk/control questions 401-4, 665-6 Human Rights Act 1998 525, 581, 592, 640-1, 640 Hungary 746, 796 hybrid audit universe 30 hygiene factors of job satisfaction IBM 199 **ICAEW** PCAOB 157, 174-6 spreadsheet best practices 70 Iceland 746, 797-8 ICQs see internal control questionnaires ICRP, British Petroleum 199 identity theft 672-9 IEC see International Electrotechnical Commission IM see information management impact assessments, concepts 52-6, 101-15, 122-3, 207-8, 460-2, 471-5 improvement programmes, operational auditing 214-35 inaccurate information 57-74, 124-7, 242-51, 272-4, 283-9, 291-316, 493-5, 507-10, 514-23, 705-6, 710-11 incident management 487, 520-3, 646, 671-9, 681-2, 707-9,842 see also disaster...; information security... independence issues 25, 94, 151-77, 205-6, 215-35, 241 - 2

see also objectivity...

India 581, 746, 798-803 induction processes, personnel 661-2 induction training 411-13 informal coalitions, formal procedures 31-2 informal organisations, concepts 189 information asset registers collection methods 505-6 concepts 497, 502-10, 515-23, 527-41, 681-7, 700-1, 715, 725, 847, 850 control objectives 505-6, 507-8 costs and benefits analysis 507-10 data fields 504-6, 700 definition 502-7 ownership issues 504-5, 507-10, 701-2, 847 responsibilities 503, 507-10, 847, 851 risk/control questions 509-10 security issues 504-10, 847 information business process, concepts 34 Information Commissioner 617-26, 628-35, 759-60 see also data protection; freedom of information 'information and communication' component, COSO internal control framework 120-1, 124-7, 157-8, 170 - 7information definitions 543-5, 836 information management (IM) 479-88, 496-501, 506-10, 514-23, 524-5, 587-9, 613-15, 645-7,715, 725, 836, 839 See also knowledge...; records... control objectives 521-2 definition 514-16, 836 risk/control questions 521-3 information requirements 12-14, 47-50, 82-4, 120-1, 124-7, 151-77, 188-9, 208-13, 242-3, 272-4, 286-9, 401-36, 448-52, 502-10, 514-23, 613-15, 710 - 11see also financial information... material information 151-77 subsidiaries 277-84, 366-8 information security incidents 487, 520-3, 646, 671-9, 681-3, 707-9, 841-2 concepts 520-3, 671-9, 681-3, 841-2 control objectives 676-7 examples 671-3, 674-5, 681-3 management 487, 520-3, 673-9, 681-2 risk/control questions 677-9 statistics 671-2 UK examples 672-3 US examples 673, 682-3 information sharing agreements (ISAs) 639-44 information technology (IT) 6, 8–9, 43–4, 56–74, 103, 113, 121-4, 136-7, 179-81, 188-9, 192, 195, 233-4, 479-711, 712-28 see also facilities management; hardware...; software... accounting 710-11 back-up systems 8, 43–4, 67–74, 486, 497–501, 505-10, 521-3, 537-41, 558, 562-5, 584, 588-9,846 BACS 245, 261, 487, 696–8

best practices 480–8, 521–3

- capacity management 486, 497, 511–13, 520–3, 715, 725, 846
- concepts 479–88, 712–28
- contingency plans 497-501, 512-13, 528-41, 561, 658-60, 671-9, 689-90, 707-9
- data retention and disposal 487, 497, 524–41, 562–5, 620–6, 638–44, 680–7, 851
- databases 9, 43, 57–74, 136–7, 502–10, 544–53, 613–15
- EDI 43-4, 198, 248-50, 487, 688-90
- emails 487, 497, 520-3, 581-4, 590-7, 691-3, 841
- health checks 487, 707–9
- Helpdesks 587, 594, 674–5, 694–5
- human resource information security 661–6, 667–70, 841–2
- information security incidents 487, 520–3, 646, 671–9, 681–3, 707–9, 841–2
- Internet 10, 35–6, 40, 44, 92–3, 121–2, 479, 487, 497, 581, 593–4, 598–604, 609–10, 646, 667–70, 842–3
- legislation 9, 43-4, 404-7, 479-88, 496-501,
- 514-23, 525-41, 581-4, 645-7, 707-9, 729-834
- logging systems 487, 576–9, 588–9, 667–70, 694–5 organisational structures 8, 486, 493–5, 524–41, 715,
- 725
- overview 486-8
- ownership issues 504–5, 507–10, 524–41, 578–9, 701–2, 838
- personal computers 8–9, 43–4, 486–8, 562–5, 570–5, 580–9
- policies 479–88, 489–501, 506–10, 511–13, 514–41, 554–8, 566–9, 576–9, 580–4, 585–9, 591–7, 599–604, 715, 725, 839–51
- processing operations 559–61
- remote working 487, 497–501, 520–3, 585–9, 844
- removable media 487, 497–501, 520–3, 533, 566–9, 844–5 responsibilities 493–5, 497–501, 503, 518–23,
- 524-41, 556-8, 563-5, 585-9, 601-4, 616-26, 627-44, 645-7, 661-6, 691-3, 851
- SAPG 715–16, 725–7
- service management 483-4
- sites and infrastructure 486, 554-8, 715, 725, 843
- spreadsheets 40, 53–4, 56–74, 487, 699–706 standards 480–8, 493–5, 515–41, 581–4, 645–7, 652–4, 701–6
- strategic planning 8, 486, 489–92, 511–13, 582–4, 715, 725
- system development 487, 651–7, 699–706
- systems and operating software 9, 43–4, 64, 71–4, 487, 559–61, 570–5, 667–70 terms of reference 493–5
- user support services 487, 694–5
- inherent risk
  - *see also* control matrices; gross...; risk concepts 52–4, 55–6, 57–74, 101–15, 122–3, 208–13, 275
  - definition 52-3, 101

inputs operational auditing evaluations 219-35 systems concepts 131-5 three Es (effectiveness, efficiency, and economy) 15-16, 19-23, 29-30, 219-35 VAT 261-3 Institute of Internal Auditors (IIA) 3-5, 11-12, 16-19, 21-6, 76-82, 93, 95-8, 115, 121-2, 139-41, 157, 171, 176-7, 204, 210, 212, 214-19, 225, 229, 232-5, 5701000 (Purpose, Authority, and Responsibility) 217 1010 (Recognition of the Definition of Internal Auditing...) 217 1100 (Independence and Objectivity) 25, 94, 176, 215 1130 17, 171 1210 16 2010 176, 212, 234 2020 17 2100 (Nature of Work) 76-7, 93 2110 (Governance) 16, 25-6, 77-82 2120 (Risk Management) 77-9, 95-9, 176 2130 (Control) 77-9 2210 175 2600 25 CCSA programme 204, 210 internal control framework 139-41, 157, 176 Quality Assurance and Improvement Program 214 - 17standards 3, 11-12, 16-19, 21-6, 76-80, 95-8, 115, 121-2, 139-41, 171, 176, 214-17, 225, 229, 232 - 5insurance cover 296, 385-98, 413-15, 430, 434-6, 457, 458-62, 555-8, 671-9, 713, 721 see also security claims 460-2 concepts 296, 389-92, 454, 460-2, 555-8 contracting 296, 389-92 control objectives 460-1 costs and benefits analysis 460-2 distribution 385–98 risk/control questions 461-2 types 460-2

- integrity business process, concepts 34, 96–115, 121–4, 147–50, 248, 493–5, 610–12
- intellectual property 345–8, 366, 439–42, 450–2, 453–62, 533, 594–7, 646, 672–9
- see also patents
- inter-group rivalries, intra-group loyalties 30–2
- interim payments for contracts, concepts 9, 44, 290,
- 308-13
- internal auditors, CIA designation 204
- internal audits see operational auditing
- internal checks, concepts 116–17
- internal control questionnaires (ICQs) 40-74
- internal controls
  - see also Sarbanes-Oxley Act 2002
  - BPR 181

internal controls (cont.) business processes 34-9, 116-46 categories of control 137-9, 144, 168-70 CoCo framework 117-18, 129-30, 141-3, 144, 157-8, 208-9 concepts 3-26, 29-30, 34-9, 40-74, 75-94, 96-8, 116-46, 147-50, 151-77, 201-13, 226-35, 281-4, 470-5, 718 contemporary understanding 116, 117-18 control-effectiveness measurements 127-8, 141-3, 151-77, 209-13 corporate governance 76-94 COSO framework 117-28, 140, 142, 144, 157-77 definitions 5-6, 15, 77-9, 116-20, 128-30, 140-1 division-with-supervision opportunities 135-7, 142-3, 150 failures 141-3, 151-77 frequency issues 169-70 IIA framework 139-41, 157, 176 joint ventures 281-4 objectives 77-81, 96-9, 116-20, 123-30, 139-41, 151 - 77process issues 143-4 risk management 75-94, 96-8, 112-15, 122-3, 137-42, 147-50, 151-77, 232-5 'Rubik cube' 120 - 1SAPG 718 ship analogy 119-20 systems/cybernetics model 130-5 Turnbull framework 117-18, 120, 128-9, 140-2 144, 157-8, 170-1 internal environment 98-115 75, 78, 81-2. internal governance processes, concepts 84-7 internal telephone directories 28 International Electrotechnical Commission (IEC) see also ISO... background information 480-8 international legislation 616, 627-3, 729-834, 848 data protection 616, 729-62, 848 freedom of information (FoI) 627-8, 763-834, 848 International Professional Practices Framework (IPPF) 76, 215, 225 Internet 10, 35–6, 40, 44, 92–3, 121–2, 479, 487, 497, 581, 593-4, 598-604, 609-10, 646, 667-70, 842-3 see also information technology access controls 599-604, 667-70, 842-3 concepts 598-604, 609-10, 646, 667, 842-3 control objectives 602 historical background 598-9 policies 599-604, 842-3 risk/control questions 603-4 statistics 598-9 websites 10, 35-6, 40, 44, 92-3, 218, 712, 729-834 interviews 57-8 intra-group loyalties, inter-group rivalries 30-2 intranets 546-8 inventories 7-8, 33-4, 42, 51, 195-8, 240, 266-8, 321, 327, 362-6, 380-2, 383-98, 681, 713

see also stock... concepts 7-8, 195-8, 266-8, 383-98 control objectives 266 key spreadsheets 700-1 risk/control questions 266-8 valuations 266-8 investigative category of control 139, 144 investments concepts 7, 240, 274-5, 713 control objectives 274 risk/control questions 274-5 investors 33-4, 42, 93 invoices 246-51, 268, 354-5, 372-5, 389-92, 446-7, 688 - 90see also accounts payable; accounts receivable inward focus of benchmarking 24 IP addressable devices 707 Iran 747, 803 Iraq 747, 803 Ireland (Eire) 747, 804 irregular tests of information flows, operational auditing definition 14 ISAs see information sharing agreements Isle of Man 747, 804 ISO 182 183-4, 466-7, 480-8, 496, 526, 640, 707 see also British Standards Institute (4000 series 466-7, 475 5489 (Information and Documentation–Records Management) 484-6, 526 background information 182, 183-4, 466-7, 480-8 ISO/IEC 17799 481, 526, 640 ISO/IEC 20000-1 484 ISO/IEC 27000 series 480-4, 526, 640, 707 ISO/IEC, background 480-8, 496 Israel 747-8, 804 IT see information technology Italy 748, 804-5 Jaenicke, H.R. 34 Jamaica 748, 805-6 Japan 154, 195, 466, 581, 748, 806 JCL 560-1, 575 Jersey 748, 807 Jikoda ('stop everything...') 195-6 JIT... see just-in-time... job descriptions/specifications 144, 149, 401-4, 405-7, 493 - 5job satisfaction 190-1 Johnson, K.P. 34 Joint Information Systems Committee (JISC) 534 joint ventures concepts 279-84 cultural issues 280-1 definition 279-80 just-in-time management (JIT) concepts 178, 195-8, 285, 317, 383 costs and benefits analysis 197-8 cultural issues 196 definition 195

operational auditing 196-8, 285 just-in-time purchasing (JITP), concepts 196-8, 285 Kanban cards 196-8 Kazakhstan 807 Kenya 749, 808 key issues, SAPG questions 46-50 keying errors 57-74, 699-700 King Report on Corporate Governance, South Africa 140.141 KM see knowledge management know-how 543-53, 838 knowledge management (KM) see also data...; information... benefits 542-5 best practices 485-8 BSI guidance publications 486 concepts 479-88, 497-501, 519-23, 542-53, 715, 725, 836-8, 849-50 control objectives 550-1 definitions 485-6, 542-5, 836-8, 849 information sources 542-6 lessons learned 549-53 life-cycle issues 544-5, 547-9 policies 549-53, 849-50 responsibilities 550-3, 849-50, 851 risk/control questions 551-3 tacit/explicit knowledge 544-53, 836, 838 why-what-who-how questions 549-50 knowledge/skills/competencies requirements of auditors 16-18, 86-7, 158-60, 218, 233-4 labour relations 7, 399, 400-4, 430-2, 714 concepts 430-2 control objectives 431 risk/control questions 431-2 LANs see local area networks laptop computers 580-9, 672-3 Latvia 749, 809 law and regulatory compliance see also compliance...; legislation; regulations concepts 4-5, 8, 318, 338-9, 665-6, 714 control objectives 338 risk/control questions 338-9 law of requisite variety 131-5 leadership qualities 118-20 learning 129-30, 144, 208-13, 542-53 least cost basis 22-3 Lebanon 749, 809-10 legal departments 6, 27, 41, 43, 368, 450-2, 645-7, 712-15, 721 legislation 46, 77-9, 96-115, 117-46, 242-3, 261-6, 272-5, 287-9, 291-316, 319-42, 363-82, 385-98, 400-36, 439-52, 463-75, 479-88, 496-501, 514-23, 524-41, 602-4, 616-35, 640-4, 645-7, 674-9, 680-7, 707-11, 712-15, 721, 729-834 see also individual Acts data protection 9, 43-4, 404-7, 479-88, 496-501, 514-23, 524-41, 581-4, 590-7, 616-26, 631-2, 639-44, 646, 729-62, 835, 838, 842, 848

freedom of information 627-8, 763-834, 848 international legislation 616, 627-8, 729-834, 848 IT 9, 43-4, 404-7, 479-88, 496-501, 514-23, 525-41, 581-4, 645-7, 707-9, 729-834 list of IT legislation 525-6, 581, 645-7, 729-834 records management 524-41, 646-7, 680-7, 849 Lesotho 749, 810 lessons learned 549-53 Liberia 749, 810-11 Libya 749, 811-12 Liechtenstein 749, 812 life-cycle issues 372-5, 468-75, 544-5, 547-9, 661-6, 680 - 7Likert's linking pins, concepts 31-2 Limitation Act 1980 646 line marketing, definition 344 linking pins, concepts 31-2 listed companies 151-77 Listing Rules 176 Lithuania 749, 812 loans 10-11, 110, 194, 259-61 local area networks (LANs) 9, 43-4, 489, 584, 609-12, 673, 693 Local Government Acts 646 logging systems 487, 576-9, 588-9, 667-70, 694-5 logical security see system access controls legistics 8, 42, 383, 384-8, 714 see also distribution London listings 155 Luxembourg 749, 812-13 Macedonia 750, 813 McRae, Elizabeth 218 maintenance 8, 9, 44, 318, 339-42, 377-80, 435-6, 487, 504-10, 528-41, 570-5, 605-8, 651-7, 699-706, 714 see also facilities, plant and equipment; software... contracting obligations 9, 44 control objectives 340, 377-8 MISs 57-74 production/manufacturing 8, 318, 339-42 records management 528-41, 849 risk/control questions 340-2, 378-80 maintenance and servicing 8, 343, 377-80, 715 see also after sales support concepts 377-80 control objectives 377-8 risk/control questions 378-80 Malaysia 750, 814 malicious software 9, 43, 497–501, 520–3, 563–9, 570-5, 583-4, 590-7, 601-4, 671-9, 691-3, 707-9, 841, 846 see also malware; spyware; viruses malpractice 57-74, 84-5, 142-4, 149-50, 151-77, 242-8, 259-61, 271-2, 288-9, 291, 294, 298-9, 315-16, 327, 352-9, 363-6, 375, 377, 389-95, 397-8, 415-24, 434-6, 446-7, 453-62, 494-501, 523, 537-41, 554-8, 566-9, 580-4, 588-604, 661-79, 683-7, 696-700, 710-11, 840-51

Malta 750, 814 malware 9, 43, 497-501, 520-3, 563-9, 570-5, 596-7, 601-4, 671-9, 691-3, 707-9 management see also Sarbanes-Oxley Act 2002 back-up and media management 8, 43-4, 67-74, 486, 497-501, 505-10, 521-3, 537-41, 558, 562-5, 584, 588-9, 846 business management techniques 178-98 capacity management 486, 497, 511-13, 520-3, 846 concealed risks 107-10 CSAs 199-213 data protection 9, 43-4, 404-7, 479-88, 496-501, 503-10, 514-23, 525-41, 562-5, 581-4, 590-7, 616-26, 631-2, 639-44, 848 delayering considerations 178, 187-9 EDI 43-4, 198, 248-50, 487, 688-90 emails 487, 497, 520-3, 581-4, 590-7, 691-3 environmental issues 463-75 ethics/competencies 147-50, 158-77, 209-13, 215 - 35facilities management 9, 43-4, 192, 648-50 fraud 149-50, 153-77 freedom of information 479-88, 497-501, 503-10, 516-23, 525-41, 581-4, 590-1, 627-35, 640-1, 646-7, 763-834, 848 human resource information security 661-6, 667-70, 841 - 2human resource management 3, 5, 6, 7, 27-8, 103, 113, 121-2, 399-436 information asset registers 502-10, 515-23, 527-41, 681-7, 700-1, 847, 850 information management 479-88, 496-501, 506-10, 514-23 information security incidents 487, 520-3, 671-9, 681-2, 707-9, 841-2 internal controls 3–26, 29–30, 34–9, 40–74, 75–94, 96-8, 116-46, 147-50, 151-77, 201-13 Internet 10, 35–6, 40, 44, 92–3, 121–2, 479, 487, 581, 593-4, 598-604, 842-3 IT overview 479-88 joint ventures 279-84 knowledge management 479–88, 497–501, 519–23, 542-53, 849-50 legal responsibilities 645-7, 844 objectives 12-14, 16-17, 29-30, 47, 118, 147-50, 201-13, 214-35 records management 479-88, 496-501, 502-10, 511-13, 515, 517-23, 524-41, 680-7, 849 software maintenance/development controls 9, 43–4, 64, 67-74, 487, 605-8, 651-7, 699-706 software selection 655-7, 845 span of control 118-20, 187-8 spreadsheets 40, 53-4, 56-74, 487, 699-706 subsidiaries 3, 265, 276-84, 366-8 system access controls 8, 487, 576-9, 661-6, 707-9 system development 487, 651-7, 699-706 systems and operating software 570-5, 667-70 user support services 487, 694–5

management and administration 6-7, 41, 51, 712-13, 721 management controls see internal controls management information systems (MISs) concepts 41-4, 51, 56-74, 125-7, 362, 367, 368, 548-9, 710-11, 721 control matrices 56-74 risk exposures 56-74 managing customers as strategic assets (MCSA) 344 mandatory/regulatory/statutory data transfers 636-44 manpower and succession planning concepts 7, 399, 407, 408-10, 713 control objectives 408 risk/control questions 408–10 manual logs, concepts 667–70 manufacturing see production... Marconi 97-8 market research concepts 8, 43, 346-7, 348-50, 442, 714 control objectives 343-9 costs and benefits analysis 349-50 definition 348 risk/control questions 349-50 market shares 268-70, 279, 363-4, 389-92 marketing and sales 3, 5–6, 8, 27–8, 32–5, 43, 51, 113, 194, 343-82, 438-42, 620, 714, 724 ee also after sales...; agents; distributors; order processing; pricing. . .; product. . .; promotion. . .; sales... concepts 8, 343-82, 620, 714, 724 control objectives 344-81 data protection 620-6 definition 343-4 overview 343-4 parent company relationships 366-8 risk/control questions 344-81 SAPG 714, 724 Maslow's hierarchy of needs 190-1 material information 151-77 'material weaknesses', definitions 153, 156-7, 172 materials and energy concepts 8, 318, 327-30, 392-5, 463-75, 714 hazardous materials 332-8, 395-8, 428-30, 457-60, 463-75, 554-8 maturity models, operational auditing 218-19 Maxwell, Robert 415 media 8, 43-4, 67-74, 91, 486, 496-501, 505-10, 520-3, 537-41, 558, 562-5, 713, 721 metadata 497, 502-10, 515-23, 527-41, 837 see also information asset registers metropolitan area networks (MANs) 609-12 Mexico 751, 815 milestones 294-5, 306-16, 510 minutes of meetings 128 mission 71-4, 95-8, 112-15, 209-13 misstatements 109, 151-77, 259-61, 271-2, 315-16 mobile phones 585-9 Mongolia 751, 816

monitoring 7, 8, 14, 51, 71–4, 99–115, 120–1, 127–30, 142, 144, 157-8, 170-7, 185-7, 208-13, 214-15, 223-35, 240, 256-8, 306-8, 343, 346, 359-62, 437, 442-5, 487, 517-23, 592-7, 652-4, 667-70, 694-5, 710-11 emails 592-7 information flows 14, 99-115, 120-1, 127-30, 170-1, 208-13, 272-4, 667-70 information management 517-23, 667-70 logging systems 487, 576-9, 588-9, 667-70, 694-5 ongoing monitoring 214-35 project appraisal and monitoring 8, 437, 442-5, 651 - 4risk matrices 102–6 sales performance and monitoring 8, 343, 346, 359 - 62'monitoring' component, COSO internal control framework 120-1, 127-8, 142, 144, 157-8, 170-7 moral hazard 144 mortgages 10, 110 motivation levels 71-4, 120-2, 148-50, 181, 184-7, 190-1, 196-8, 203-4, 400-36, 547 Mozambique 752, 817 multinational enterprises 5-6, 12-14 NAID 684-5 Namibia 752, 817 National Environmental Policy Act 465-6 Nationwide Building Society 672 Nepal 752, 817-18 NESTOR 534 Netherlands 534, 752, 818-19 nett risk see residual risk networks 9, 43-4, 487, 489, 511-13, 546-53, 554-8, 580-9, 609-12, 673, 693, 707-9 concepts 609-12, 707-9 control objectives 610-11 MISs 68–74 risk/control questions 611–12 statistics 609-10 types 609-10 new products 8, 34-5, 343, 345-8, 438-52, 473 see also product development New Zealand 752 news groups 600-4 Nicaragua 752, 820 Nigeria 752, 820 non-audit services 163-77 nonexecutive directors 87-90, 127-8 Norway 752, 820-1 Novell networks 68 nuclear industry 109 'number of auditors per 1000 staff', operational auditing evaluations 223-33 objectives mission 112-15 perspectives 12-14, 16-17, 25, 64, 71-4

'triple bottom line' objectives 464, 473

objectivity issues 14, 17, 25, 94, 176, 205-6, 215-35 see also independence... Obscene Publications Acts 646 obsolescence 380-2, 532-41, 681-7 omissions 57-74, 151-77 ongoing monitoring, operational auditing 214-35 Open Document Management API (ODMA) 531-2 open systems, concepts 131-5 operational auditing added value 21-3, 76, 211-12, 219-35, 364-6, 370-1, 391-2 approaches 3-26 assessments 214-35, 470 audit approaches 12–16 'budget/actual comparisons' 223-33 business management techniques 178-98 business processes 3-4, 27-39, 240, 712 - 28Charters 217–35 concepts 3-26, 27-39, 76-94, 99-115, 170-3, 178-98, 201-13, 214-35, 470, 712-28 corporate governance 3, 5-6, 9-10, 17, 22, 25-6, 29-30, 34, 44, 75-94, 176-7, 205, 232-5, 479-5, 509-10, 718 costs and benefits analysis 219-35 CSAs 18–19, 30, 41, 102–3, 128, 199–213, 718 data protection 9, 43–4, 404–7, 479–88, 496–501, 503-10, 514-23, 525-41, 562-5, 581-4, 590-7, 616-26, 631-2, 639-44, 729-62, 848 data retention and disposal 487, 497, 524-41, 562-5, 620-6, 638-44, 680-7, 851 data transfers and sharing 515-23, 542-53, 636-44, 688-90, 704-6, 850 databases 9, 43, 57-74, 136-7, 502-10, 544-53, 613-15 definitions 3-5, 12-13, 14, 21-2, 76, 95, 835-8 EDI 43-4, 198, 248-50, 487, 688-90 emails 487, 497, 520-3, 581-4, 590-7, 691-3 empowerment considerations 191 environmental issues 463-75 evaluations 214-35 external reviews 214, 216-17 facilitation roles 201-6, 212 finance and accounting 3, 6, 7, 27, 32–5, 42, 117, 143-5, 192, 197-8, 239-75, 713, 722 freedom of information 479-88, 497-501, 503-10, 516-23, 525-41, 581-4, 590-1, 627-35, 763-834, 848 functional approaches 3-26, 27, 30, 41-5, 240-75, 712-28 good management practices 228-30, 251-75, 699-706 human resource information security 661-6, 667-70, 841-2 improvement programmes 214-35 information asset registers 497, 502-10, 700-1, 847, 850 information management 479-88, 496-501, 506-10, 514 - 23

operational auditing (cont.) information requirements 12-14, 47-50, 82-4, 120-1, 124-7, 170-1, 272-4, 514-23, 710-11 information security incidents 487, 520-3, 671-9, 707-9,841-2 input performance measures 221-35 Internet 10, 35-6, 40, 44, 92-3, 121-2, 479, 487, 581, 593-4, 598-604, 842-3 IT overview 479-88, 715-16 IT strategic planning 489-92, 511-13, 582-4, 715, 725 joint ventures 282-4 knowledge management 479-88, 497-501, 519-23, 542-53, 849-50 legal responsibilities 645–7, 844 management and administration 6-7, 41, 51, 712-13, 721 maturity models 218-19 networks 487, 511-13, 546-53, 554-8, 580-9, 609-12, 707-9 'number of auditors per 1000 staff' 223-8 objectives 12-14, 16-17, 25, 230-5, 470 ongoing monitoring 214-35 output performance evaluations 219-35 performance/productivity measurement systems 9, 19-23, 31, 78, 84, 85, 219-35, 290, 306-8, 313-16, 319-42, 359-66, 424-7 periodic internal reviews 214-35 profitability contributions 219-35 quality assurance 182-7, 214-35, 330-2 quantitative/quasi-quantitative/qualitative performance measures 221-8 'ratio of payroll to other costs' 223-33 223-33 'ratio of productive/unproductive audit time recessions 82-3, 219-20 recommendations 226-35 records management 479-88, 496-501, 502-10, 511-13, 515, 517-23, 524-41, 680-7, 849 responsibilities 29–30, 47, 87, 100, 112–15, 118–20, 125-30, 135-7, 144, 148-50, 170-3, 201-2, 493-5, 497-501, 503, 518-23, 661-6, 691-3, 851 reviews 214-35 SAPG 10, 35-6, 40-74, 240-1, 285, 318, 345, 384, 400, 438, 454, 470, 488, 712-28 scope 3-12, 16-17, 27-39, 152, 164, 166-7, 170-3, 201-2, 218-35, 239-40, 469-75, 707-9 software maintenance/development controls 9, 43-4, 64, 67-74, 487, 605-8, 651-7, 699-706 software selection 655-7, 845 spreadsheets 40, 53-4, 56-74, 487, 699-706 subsidiaries 3, 265, 276-84, 366-8 system access controls 8, 487, 576–9, 661–6, 707-9 system development 487, 651-7, 699-706 systems and operating software 570-5, 667-70 value for money auditing 21-3, 230-3, 353 weaknesses 217-18 operational level of risk, concepts 52

operational review programmes, development issues 40 - 74operations logs for MISs 68-74 operations and resource management see also production/manufacturing concepts 317-42 opportunities, risk management 111, 113-15, 226-8 optical disks 566-7 order processing 8, 343, 362, 366, 371-5, 385-8, 398, 714 see also accounts receivable; credit-granting...; debtors; marketing. . . concepts 362, 366, 371-5, 388 control objectives 372 definition 371-2 life-cycle issues 372–5 risk/control questions 373-5 organisational structures concepts 5-6, 8, 31-2, 47-50, 110, 118-22, 178-98, 486, 493–5, 524-41 IT organisation (8, 486, 493-5, 524-41 organising 5-6, 116, 118-20 out-of-date information 57-74 out-of-stock situations 380-2, 392-5 outputs C operational auditing evaluations 219-35 systems concepts 131-5 three Es (effectiveness, efficiency, and economy) 15-16, 19-23, 29-30, 219-35 VAT 261-3 outsourcing considerations 18-19, 22-3, 116, 144, 178, 191-5, 220-1, 234, 648-50, 651-7, 683-7, 716-17, 726-8 see also contracting. . .; facilities management cleaning firms 192, 193 core/non-core activities 193-4, 195 costs and benefits analysis 192-4, 220-1, 648-50, 655-7 cultural issues 192, 193, 220-1 definition 191–2 disposal of records 683-7 personnel impacts 192, 193-4 public sector 192 risk/control questions 192, 193, 194-5, 220-1, 649 - 50outward focus of benchmarking 24 overdrafts 258-61 overhead costs 317-42 overseas operating units 3 ownership issues information asset registers 504-5, 507-10, 701-2, 847 IT 504-5, 507-10, 524-41, 578-9, 701-2, 838 policies 498-501, 578-9, 701-2 P11D returns 424 packaging, environmental issues 468-75 Pakistan 753, 821 paper records, retention issues 680-7

INDEX

875

parameters to MISs 57-74 parent companies see also subsidiaries concepts 265, 276-84, 366-8, 714 passwords 58-74, 518-23, 527-41, 576-9, 585-9, 601-4, 623-6, 638-44, 707-9, 843 patch management 487, 520-3, 570-5, 707-9, 845-6 patents 345-8, 439-42, 450-2, 581, 594-5, 646 see also intellectual property payments business process, concepts 34-5 payroll see also remuneration concepts 7, 27–8, 33–4, 42, 53–4, 223–33, 240, 243-5, 362, 405-7, 415, 713 control objectives 243-4 risk/control questions 244–5, 362 PCAOB see Public Company Accounting Oversight Board PCs see personal computers PDAs 567. 580-9 peer groups, knowledge management 546-53 pension schemes and other benefits 7, 42, 399, 415-24 see also health insurance concepts 415-22 control objectives 416-17 ethics 415-22 risk/control questions 417-22 performance category of control 138 performance-related compensation schemes see also pension schemes... concepts 415-22, 713 performance/productivity measurement systems 19-23, 31, 78, 84, 85, 219-35, 290, 306-23 313-16, 319-42, 359-66, 424-7 concepts 8, 9, 19–23, 31, 44, 74, 78, 84, 85, 209–13, 219-35, 270, 290, 306-8, 313-16, 319-42, 343, 346, 359-66, 424-7, 652-7 contracting 9, 290, 306-8, 313-16, 385-92 distributors 362-6, 388-92 milestones 294-5, 306-16 personnel 234, 314-16, 324-7 policies 20-1, 85 reviews of project outturn/performance 313-16 sales performance and monitoring 8, 343, 346, 359-62 staff appraisals 7, 234, 314-16, 324-7, 399, 400-4, 413, 424-7 three Es of effectiveness, efficiency, and economy 19-23, 77-9, 84, 85, 117-46, 215-35 perimeters and external environs, IT sites and infrastructure 555-8, 843 periodic internal reviews, operational auditing 214-35 personal computers (PCs) 8-9, 43-4, 486-8, 562-5, 570-5, 580-9, 608, 623-6, 699-706, 840-1 see also information technology concepts 580-4 control objectives 582 risk/control questions 582-4 statistics 580-1

personal data, data protection 617-26, 636-44, 646, 729-62, 837, 848 personnel 3-8, 15-16, 20-1, 27-8, 33-4, 42, 53-4, 71-4, 84-5, 91-4, 112-15, 118-22, 125, 144, 147-50, 178, 188, 189-98, 241-5, 291, 294, 317-42, 343, 355-9, 399-436, 454-62, 489-501, 510, 516-41, 661-6, 713-14, 722-3 see also health...; human resource...; manpower...; pension schemes...; recruitment...; training... absenteeism rates 325-7, 401-4, 425-7 Codes of Conduct 148–9 company vehicles 7, 399, 432-6, 556-8 concepts 7, 399-436, 661-6, 713-14, 722-3 contracts of employment 405-7, 441-2 control objectives 325, 399-436, 664 data protection 616-26, 631-2, 639-44 definition 399-400 disciplinary/grievance\_procedures 7, 85, 149, 399, 400-4, 424-7, 594-7, 604, 641-4 efficiency issues 75-16, 20-1 emails 487, 497, 520-3, 581-4, 590-7 empowerment considerations 178, 188, 189-91, 195-6 fraud 149-50, 242-5, 291, 294, 327, 355-9, 494-5, <u>~588–97</u> needom of information 631–5, 848 group loyalties/rivalries 30-1 induction processes 661-2 information security 487, 520-3, 646, 661-6, 667-70, 671-9, 841-2 Internet 10, 35–6, 40, 44, 92–3, 121–2, 479, 487, 581, 593-4, 598-604, 842-3 JIT 195-8 job descriptions/specifications 144, 149, 401-4, 405-7, 493-5 job satisfaction 190-1 labour relations 7, 399, 400–4, 430–2 legal responsibilities 645-7, 844 maintenance 8, 9, 44, 318, 339-42 motivation levels 71-4, 120-2, 148-50, 181, 184-7, 190-1, 196-8, 203-4, 400-36, 547 outsourcing impacts 192, 193-4 overview 399 payroll 7, 27-8, 33-4, 42, 53-4, 223-33, 240, 243-5 performance/productivity measurement systems 234, 314-16, 324-7 production/manufacturing 317-42 quality assurance systems 182–7 remote working 487, 497-501, 520-3, 585-9, 844 removable media 487, 497-501, 520-3, 533, 566-9, 672-3, 844-5 remuneration 325-7, 355-62, 400-7, 415-22 retention rates 149-50, 325-7, 401-4, 441 risk/control questions 325-7, 399-436, 665-6 sales management 8, 343, 355-9 SAPG 713-14, 722-3 security policies 495, 496-501, 520-3, 554-8, 661-6, 839-43, 849 share schemes 415-22

personnel (cont.) spreadsheets 40, 53-4, 56-74, 487, 699-706 staff appraisals 7, 234, 314–16, 324–7, 399, 400–4, 413, 424-7 succession planning 7, 399, 407, 408-10 system access controls 8, 487, 576–9, 661–6, 667-70, 707-9 tacit knowledge 544-53 termination of employment 400-4, 410, 425-7, 662-6, 841-2 turnover rates 149-50, 325-7, 401-4 user support services 487, 694-5 welfare 7, 399, 400-4, 413-15 whistleblowing policies 84-5, 121-2, 149 Peru 753, 821 petty cash and expenses, concepts 7, 240, 270-2, 713 Philippines 753, 822 physical security 332-5, 428-30, 454-62, 486, 495, 496-501, 520-3, 554-8, 588-9, 638-44, 658-66, 667-70, 681-7, 707-9, 837, 849 see also security control objectives 556, 664 fire hazards 332-5, 428-30, 454-62, 554-8, 660 IT health checks 487, 707-9 IT sites and infrastructure 486, 487, 520-3, 554-8, 658-60, 671-9, 681-7, 715, 725, 843 risk/control questions 557-8, 665-6 security policies 495, 496-501, 520-3, 554-8, 661-6, 839-43, 849 pilot exercises 71-4 PLANETS Project 535 planning 5-6, 8, 11-16, 19-21, 34-5, 41-5, 110, 116, 118-20, 207, 219-35, 318-21, 350, 359-61, 442, 712-14, 721 control matrices 64, 71-4 control process concepts 8, 34–5(219–35, 318–21, 350 production control concepts 8, 318–21, 714 three Es (effectiveness, efficiency, and economy) 15-16, 19-23, 219-35 plant and equipment see also facilities, plant and equipment concepts 8, 318, 319-24, 339-42, 427-30, 445-7, 457-60, 714, 715 R&D equipment 8, 437, 445-7 Poland 753, 822 policies 20-1, 81-4, 85, 87-90, 211, 241-2, 332-5, 428-30, 457-60, 479-88, 489-501, 506-10, 511-13, 514-41, 549-58, 566-9, 839-51 see also procedures boards of directors 81-4, 87-90, 211 Data Protection Act 1998 616-26, 639-44, 646, 759-60, 835, 838, 842, 848 emails 591-7, 841 freedom of information 628-35, 763-834, 848 information management 479-88, 496-501, 506-10, 514 - 23Internet 599–604, 842–3

IT 479-88, 489-501, 506-10, 511-13, 514-41, 554-8, 566-9, 576-9, 580-4, 585-9, 591-7, 599-604, 839-51 knowledge management 549-53, 849-50 ownership issues 498-501, 578-9, 701-2 performance/productivity measurement systems 20 - 1,85personal computers 580-4 remote working 585–9, 844 removable media 566–9, 672–3, 844–5 safety policies 332-5, 428-30, 457-60, 554-8 security policies 495, 496–501, 520–3, 554–8, 661-6, 839-43, 849 system access controls 576-9, 661-6 political/country risks 368 'polluter pays' principle 464–5 pollution 332-8, 463-75 portable buildings 111 Portugal 753-4, 822 post-implementation reviews 549-53 pre-approval requirements, non-audit services 164, 166 pre-emptive category of control, concepts 138 premises, security 272-4, 332-5, 428-30, 453-62 preventive category of control 137-8, 144, 168-70 PRF see profit-related pay schemes pricing and discount policies 8, 286–9, 304–6, 308–13, 343, 345-81, 389-92, 438-42, 714 see also product/project accounting concepts 353-5, 356-9 control objectives 354 definition 353 risk/control questions 354-5, 357 prior research 11-12 Privacy Rights Clearinghouse 673, 679, 682-3 privatised industries 109 probabilities, risk 52-3, 54-6, 101-15, 122-3 problem identification/solving techniques, quality assurance systems 183-4 procedures 9, 31-2, 49, 123-4, 290, 299-302, 489-501 see also policies back-up and media management 563-5, 846 tendering 9, 290, 299-302 processes 131-5, 224-35, 559-61, 621-6, 837 see also business...; efficiency... data protection 621-6 definition 837 operational auditing evaluations 224–35 systems concepts 131-5 processing IT operations concepts 559-61 control objectives 559 risk/control questions 560-1 procurement 6, 7-8, 11, 22-3, 42, 285-316, 714, 723 see also contracting; purchasing product designs, concepts 345-8, 438-42, 473 product development see also marketing...; research and development concepts 8, 343, 345-8, 366, 438-42, 473, 714, 715 control objectives 345-6, 438-9

definition 345, 438 risk/control questions 346-8, 440-2 product life business process, concepts 35 product/project accounting see also pricing and discount policies concepts 7, 240, 268-70, 353, 447-50, 713 control objectives 268 risk/control questions 269-70 production/conversion business process, concepts 33-4 production/manufacturing 3, 5-6, 8, 12-14, 27-8, 32, 33-4, 42-3, 195-8, 317-42, 385-8, 393-5, 398, 442, 463-75, 714, 723-4 see also facilities...; maintenance; materials...; personnel; planning...; safe... concepts 8, 317-42, 442, 714, 723-4 control objectives 318-42 definition 317-18 environmental issues 8, 318, 335-8 law and regulatory compliance 8, 318, 338-9 overview of functions 8, 318 risk/control questions 319-42 SAPG 714, 723-4 proficiency requirements on auditors 16-18 profit and loss accounts 54, 67-74 profit-related pay schemes (PRP) 415-22 profitability contributions of operational auditing 219-35 profits warnings 91-4 project appraisal and monitoring 8, 437, 442–5, 44' 651-4,715 concepts 442-5 control objectives 442-3 definition 442 risk/control questions 443-5 promotion and advertising see also marketing. concepts 8, 343, 347, 349, 350-3, 369-71, 391-2, 714 control objectives 350definition 350 risk/control questions 352-3, 391-2 protective marking schemes (PMS) 497, 503, 506-7, 516-23, 556-8, 640, 850 Protiviti's website 218 Public Company Accounting Oversight Board (PCAOB) 120-2, 155-77 see also Sarbanes-Oxley Act 2002 Public Records Acts 526, 533 public sector 192, 542, 610-12, 627-35, 681, 763-834, 848-9,850 publication schemes 536-41, 628-35, 848-9 pull/push production activities 195-8 purchasing 7, 11, 42, 45, 196-8, 246-8, 253-6, 285-316, 433-6 see also accounts payable; creditors; procurement; suppliers concepts 196-8, 285-316 control objectives 285-6 costs and benefits analysis 286-9

JITP 196-8, 285 price considerations 286-9, 304-6, 308-13 risk/control questions 285, 286-9 qualifications, recruitment issues 404-7, 663-6, 841 - 2quality assurance systems see also total quality management concepts 8, 182-7, 214-35, 286-9, 306-10, 314-16, 318, 319-42, 345-81, 469-70, 714, 721 control objectives 184-7, 330 costs and benefits analysis 183-5, 330-2 operational auditing 182-7, 214-35, 330-2 production/manufacturing 8, 318, 330-2 risk/control questions 185-7, 331-2 testing and inspection methods 330-2 'quality at source' approaches 195-6 quality audits, concepts 183-7 quality circles 195 quality of information concepts 14, 57-74, 109, 124-7, 151-77, 850 quality of products/services 14-24 quantitative/quasi-quantitative/qualitative performance measures, operational auditing 221-8 query languages/software 69-74, 613-15 questions 10, 35-6, 40-74, 148-50, 169-73, 185-7, 208-12, 229-35, 240-75, 285, 286-9, 292-316, 318, 344-81, 384-98, 400, 438, 454, 470, 488, 712 - 28CSAs 208-12 ethics/competencies 148-50 finance and accounting 241–75 operational auditing evaluations 229-35 purchasing 286-9 SAPGs 10, 35-6, 40-74, 240-1, 285, 318, 345, 384, 400, 438, 454, 470, 488, 712-28 R&D see research and development radical changes 122-3, 178-81 'ratio of payroll to other costs', operational auditing evaluations 223-33 'ratio of productive/unproductive audit time', operational auditing evaluations 223-33 re-order levels 380-2, 393-5 Re-use of Public Sector Information Regulations 2005 526, 646 recessions 82-3, 219-20 reconciled input data 67-74, 125-7 record creation, records management 524-41, 849 record keeping, records management 524-41, 680-7, 849 record maintenance, records management 528-41, 849 record retention, records management 497, 524-41, 562-5, 620-6, 680-7, 849, 851 recording see storage... records management (RM) see also information asset registers; information management best practices 485, 524-41

records management (RM) (cont.) concepts 479-88, 496-501, 502-10, 511-13, 515, 517-23, 524-41, 544-5, 646-7, 680-7, 715, 725, 838, 849, 851 control objectives 535-6 definition 484-5, 524-5, 838 digital preservation 531, 532-41, 681-7 ISO 15489 484-6, 526 legislation 524-41, 646-7, 680-7, 849 risk/control questions 536-41 types of records 496-7, 502-3, 524-41, 566-9, 622-6, 631-2, 681-2 recruitment issues 7, 17, 33, 42, 149, 176, 399, 400-10, 439-42, 661-6, 713, 841-2 auditors 17, 176 complaints 406-7 concepts 404-10, 439-42, 661-6 control objectives 404-5, 664 definition 404 personnel 33, 42, 149, 400-7, 661-6, 841-2 qualifications 404-7, 663-6, 841-2 references 404-7, 663-6, 841-2 risk/control questions 405-7 tests 407 recycle/reuse/reduce environmental paradigm 463-75 redundancies 410, 662-6 reference points, systems concepts 132-5 references, recruitment issues 404-7, 663-6, 841-2 registration numbers, VAT 262-3 registration procedures, quality assurance systems 182 - 7regular transfers with external parties, data transfer types 636-7, 639-44 Regulation of Investigatory Powers Act 2000 581, 592, 646 regulations 4-5, 8, 43, 46, 77-9, 96-115, 117-46, 151-77, 202, 242-75, 287-9, 291-316, 319-42, 363-82, 385-98, 400-36, 439-52, 463-75, 479-88, 496-501, 514-41, 602-4, 616-35, 640-7, 674-9, 707-11, 713-15, 721 see also legislation: Sarbanes-Oxlev Act 2002 freedom of information 479-88, 497-501, 503-10, 516-23, 525-41, 581-4, 590-1, 627-35, 640-1, 646-7, 763-834, 848 list of IT regulations 525-6, 645-7, 729-834 records management 524-41, 680-7, 849 reliability issues 4-5, 88-9, 96-115, 117-46, 170-3, 232, 251-3, 314-16, 493-5, 507-10, 535-41, 556-8, 559-61, 587-9, 595-7, 600-4, 610-26, 651-7, 705-6, 711, 835 remote operating units see also subsidiaries concepts 276-84, 366-8 remote working 487, 497-501, 520-3, 585-9, 844 concepts 585-9, 844 control objectives 587-8 definition 585-7 policies 585-9, 844 risk/control questions 588-9

statistics 585 removable media 487, 497–501, 520–3, 533, 566–9, 637-44, 672-3, 844-5 concepts 566-9, 844-5 control objectives 567-8 disposals 567-9 policies 566-9, 672-3, 844-5 risk/control questions 568-9 types 497, 566-7, 672-3 remuneration see also payroll; pension schemes... agents 368-71 auditors 176, 233 personnel 325-7, 355-62, 400-7, 415-22, 425-7 renewable energy 464-75 reporting facilities 67-74, 77-94, 96-115, 117, 124-7, 151-77, 206-7, 226-35, 272-4, 470-5, 673-9, 710-11 see also financial information... reputations 52-4, 67-74, 91-4, 113, 171-2, 222-35, 296, 330-2, 336-8, 389-92, 468-75, 529-41, 656-60, 676-9 research and development (R&D) 6, 8, 27, 34, 43, 268, 345 437-52, 715, 724-5 see also product development; project appraisal... concepts 437-52, 715, 724-5 control objectives 437–52 definition 437 development project management 8, 437, 447-50 ethics 437 grant funding schemes 450-2 legal and regulatory issues 8, 437, 450-2 overview 437 plant and equipment 8, 437, 445-7 risk/control questions 437–52 SAPG 715, 724–5 specialist staff 437-52 tests 448-52 reserves 158-60 residual risk see also risk... concepts 101-15, 142-3, 208-13 resourcing considerations, operational auditing 16–19, 30, 170-2, 220-1, 232-5, 289-316, 444-5 responsibilities 29-30, 47, 87, 100, 112-15, 118-20, 125-30, 135-7, 144, 148-50, 151-77, 195-8, 200-3, 214-35, 265, 369-71, 493-5, 497-501, 518-23, 524-41, 556-8, 563-5, 661-6, 691-3, 851 agents 369-71 audit committees 158-73, 176-7, 211, 214-35 business processes 29-30, 118-20, 200-3 contracting 291-316, 648-50 corporate social responsibilities 16, 21, 91–4, 463-75 CSAs 200-2 data protection 9, 43-4, 404-7, 479-88, 496-501, 503-10, 514-23, 525-41, 562-5, 581-4, 590-7, 616-26, 631-2, 639-44, 646, 848 environmental issues 463-75

freedom of information 479-88, 497-501, 503-10, 516-23, 525-41, 581-4, 590-1, 627-35, 640-1, 646-7, 763-834, 848 information asset registers 503, 507-10, 847, 851 IT 493-5, 497-501, 503, 518-23, 524-41, 556-8, 563-5, 585-9, 601-4, 616-26, 627-44, 645-7, 661-6, 691-3, 851 JIT 195-8 joint ventures 280-1 knowledge management 550-3, 849-50, 851 list of IT legislation 525, 581, 645-7, 729-834 Sarbanes-Oxley Act 2002 151-77, 202 security issues 454-62, 554-8, 661-6, 851 subsidiaries 276-7 taxation returns 265 viruses 691–3, 841, 846 restatements of prior year results 173 resurrected deleted files 562, 567, 682-7, 851 retention control objectives 685 data retention and disposal 487, 497, 524-41, 562-5, 620-6, 638-44, 680-7, 849, 851 personnel 149-50, 325-7, 401-4, 441 risk/control questions 685-7 return on capital employed (ROCE) 194 returned goods 289, 361-2 returns 262-3, 264-6, 273-5, 424 revenue business process, concepts 32-6, 720-8 revenue expenditure, software assets 502-3 reviews operational auditing 214-35 project outturn/performance 313-16 risk 3-6, 10, 17, 22, 25, 29-30, 36-7, 40, 41-74, 76-94, 95-115, 120-3, 137-9, 148-50, 168-70, 201-13, 453-62, 658-60, 667-70, 671-9 appetites 95-115, 208-13 aversion 111 categories 102-6, 113-15, 122-5, 137-9, 168-70, 208 - 13concepts 40, 45–6, 50–74, 95–115, 120–3, 137–9, 148-50, 168-70 control matrices 40, 53-4, 56-74 definition 52, 101 exposures 52-3, 55-74, 99-115, 453-62 levels 51-2, 102-4, 113-15, 143-5 matrices 101-6 mitigation 101-15, 207-8, 211-12, 453-62, 658-60, 667-70, 671-9 owners 107 registers 101, 106-8, 115, 168-70 responses 95-115, 122-3 sponsors 107 'risk assessment' component, COSO internal control framework 120-1, 122-3, 142, 144, 147-50, 157-8, 163-77 risk assessments, concepts 51-74, 85-6, 95-115, 120-1, 122-3, 137-9, 148-50, 168-70, 201-13, 215-35, 277-84, 368, 427-30, 453-62, 481-8, 566-9, 658-60, 699-706, 707-9

risk management 3-6, 10, 17, 22, 25, 29-30, 36-7, 40, 41-74, 75-94, 95-115, 122-3, 137-9, 152-77, 202, 205, 207-8, 232-5, 453-62, 470-5, 481-8, 674-9, 712-13, 718, 721 see also Sarbanes-Oxley Act 2002 activities fan 99-100 concealed risks 107-10 concepts 75-94, 95-115, 122-3, 137-9, 152-77, 202, 205, 207-8, 453-62, 470-5, 481-8, 674-9, 718, 721 control issues 75-94, 96-8, 112-15, 122-3, 232-5 corporate governance 76-94, 110 definition 95-8 essential effective components 98-9, 120-3, 124-8, 142, 144, 147-50 internal controls 75-94, 96-8, 112-15, 122-3, 137-42, 147-50, 151-77, 232-5 limitations 107-15 objectives 77-81, 85-6, 95-8, 112-15, 122-3 opportunities 111, 113–15, 226–8 organisational cultures 110, 115, 678-9 processes 25-115 'Rubik cube? 98-9, 120-1 SAPG 712, 718 scope of internal audit's role 99, 201-2 simultaneous risks 110–11 strategic objectives 96-8, 112-15 subjective judgements 104 tools 101-7 risk/control section of SAPGs, concepts 45-6, 47-50 robust systems 36, 141-2, 507-10, 521-3, 587-9 Romania 754, 823 Royal Dutch Shell 485-6 'Rubik cube', risk management 98-9, 120-1 Russian Federation 280-1, 754, 823 Rwanda 754, 824 safe production/manufacturing environment 8, 318, 319, 322-4, 332-5, 339, 413-15, 427-30, 457-60 safety policies 332-5, 428-30, 457-60, 554-8 sales 3, 5-6, 8, 27-8, 32-5, 43, 51, 113, 136, 194, 343-82, 385-8, 393-5 see also marketing...; order processing quotas 356-9 sales management 8, 343, 355-62, 442, 714 concepts 355-62, 442 control objectives 356 costs and benefits analysis 360-2 definition 355-6 remuneration 355-62 risk/control questions 357–9 sales performance and monitoring 8, 343, 346, 359-62, 714 concepts 359-62 control objectives 360 definition 359 sales tax see VAT samples 168-70 SAP, IBM 199

SAPGs see standard audit programme guides Sarbanes-Oxley Act 2002 see also internal controls; Public Company Accounting Oversight Board breaches 152-4 complacency dangers 167-8 concepts 151-77, 202 control registers 168-70, 173 COSO internal control framework 157-77 costs and benefits analysis 151, 154-5, 171-2 criminal sanctions 152-4, 164-77 documentation requirements 167-70 overview of sections 151-4 recognised suitable control frameworks 157-8 s.101 166 s.201 (Services Outside the Scope of Practice of Auditors) 152, 164, 166-7 s.206 (Conflicts of Interest) 152, 163-4 s.301 (Public Company Audit Committees) 152, 158-60, 176 s.302 (Corporate Responsibility for Financial Statements) 151, 153, 156-77, 202 s.303 (Improper Influence on Conduct of Audits) 152, 164–5 s.404 (Management Assessment of Internal Controls) 117, 141-2, 151-77, 202 s.406 (Code of Ethics for Senior Financial Officers) 152, 161-3 s.407 (Disclosure of Audit Committee Financial Expert) 152, 158, 161 s.906 (Corporate Responsibility for Financial Statements) 152-4 SOX-Lite 155-6 standardisation incentives 170 Saudi Arabia 755, 824 scientific management 198 SCL 560-1, 575 scope of operational auditing 3-12, 10-17, 27-39, 152, 164, 166-7, 170-3, 201-2, 213-35, 239-40, 469-75, 707-9 screensavers 623 SD memory cards 566-7 Securities & Exchange Commission (SEC) 117, 120, 141-2, 151, 154-77 Securities Exchange Act 1934 152-4, 157-77 security 272-4, 332-5, 428-30, 453-62, 463-75, 481-8, 489-95, 504-10, 514-23, 527-41, 554-8, 576-9, 613-15, 636-44, 651-7, 671-9, 713, 721, 836, 839-51 see also access...; health and safety; insurance... contingency plans 43-4, 69-74, 91, 103, 368, 397-8, 453-62, 497-501, 512-13, 528-41, 561, 658-60, 671-9, 707-9 control objectives 454-62, 664 data protection 9, 43-4, 404-7, 479-88, 496-501, 503-10, 514-23, 525-41, 562-5, 581-4, 590-7, 616-26, 631-2, 639-44, 646, 729-62, 848 data retention and disposal 487, 497, 524-41, 562-5, 620-6, 638-44, 680-7, 851

definition 453-4 fire hazards 332-5, 428-30, 454-62, 554-8, 660 information asset registers 504-10, 847 information security incidents 487, 520-3, 671-9, 681-3, 707-9, 841-2 IT health checks 487, 707-9 IT sites and infrastructure 486, 487, 520-3, 554-8, 658-60, 671-9, 681-7, 843 logging systems 487, 576-9, 588-9, 667-70 overview 454 passwords 58-74, 518-23, 527-41, 576-9, 585-9, 601-4, 623-6, 638-44, 707-9, 843 policies 495, 496-501, 520-3, 554-8, 661-6, 839-43.849 records management 527-41, 849 removable media 487, 497-501, 520-3, 533, 566-9, 672-3, 844-5 responsibilities 454-62, 554-8, 661-6, 851 risk/control questions 454-62, 665-6 spreadsheets 699-705 system access controls 8, 487, 576–9, 661–6, 667-70, 707-9 Security Industry Authority (SIA) 555 security renvices 555-8 selection and letting of contracts, concepts 9, 290, 304-6 self-actualisation concepts 190-1 rensitive company data 57–74, 124–7, 220–1, 242, 272-4, 299-302, 345-8, 351-5, 401-7, 438-42, 453-62, 503-10, 515-23, 533-41, 560-1, 566-9, 586-9, 592-7, 616-26, 636-44, 663-6, 671-9, 680-7, 688-90, 700-6, 729-62, 838 see also data protection sensitive data, data protection 617-26, 636-44, 646, 729-62,848 'seq' column of SAPG risk/control section 48-50 Serbia 755, 824 servers 487, 548, 554-8 service level agreements, IT 493-5 service packs/releases 571-5 service provisions 5-6share option schemes, personnel 415–22 share prices 93 share schemes, personnel 415-22 shareholders 81-2, 90-4, 97-8, 128-9, 464, 473-5 see also corporate governance; stakeholders sharing aspects of information management 515-23, 542-53, 636-44 ship analogy, internal controls 119-20 shredders 683–4 'significant deficiencies', definitions 153, 156-7, 172 'significant misstatement', definitions 153, 156-7 signing-off procedures 49 simultaneous risks, risk management 110-11 Singapore 755, 825 sites and infrastructure for IT see also physical security concepts 486, 554-8, 715, 725, 843

'size' row in control matrices 58-74

skills 16-18, 84-90, 122, 148-50, 158-60, 204-5, 218, 233-4, 241-2, 294-5, 318-27, 337-42, 351-66, 385-8, 396-8, 400-4, 408-13, 439-42, 489-95, 559-75, 651-4, 684 Skills for Security 684 Slovakia 756, 825 Slovenia 756, 825 software 9, 43-4, 64, 67-74, 487, 489-92, 511-13, 520-3, 531-41, 559-61, 570-5, 585-9, 605-8, 648-50, 651-7, 691-3, 699-706, 845 concepts 502-10, 554-8, 655-7, 691-3, 845 malicious software 9, 43, 497–501, 520–3, 563–9, 570-5, 583-4, 590-7, 601-4, 671-9, 691-3, 707-9, 841, 846 processing IT operations 559-61 selection considerations 655-7, 845 systems and operating software 9, 43-4, 64, 71-4, 487, 559-61, 570-5, 667-70 software maintenance/development controls 9, 43-4, 64, 67-74, 487, 605-8, 651-7, 699-706, 845 concepts 605-8, 651-7, 845 control objectives 606-7 risk/control questions 607-8 South Africa 140, 141, 756, 826 South Korea 757, 826 SOX see Sarbanes-Oxley Act 2002 SOX-Lite, concepts 155-6 Spain 757, 827 spam 590-7, 602, 707-9 span of control, concepts 118-20, 187-8 spare parts and supply 8, 343, 380-2, 715 concepts 8, 343, 380-2 control objectives 380-1 risk/control questions 381-2 specialisation 135-7, 142-3 specialist staff, research and development \ 437-52 specifications, system development 51-7, 706 sponsors 4-5, 15, 75-81, 96-9, 103, 107, 111, 115, 117-28, 140, 142, 144, 147-30, 157-77, 351-3 spreadsheets 40, 53–4, 56–74, 487, 699–706 access controls 704-6 concepts 70, 699-706 control matrices 40, 53-4, 56-74 control objectives 705 documentation needs 701-6 error types 699-700, 702 good practice 70, 699-706 ICAEW best practices 70 inventories 700-1 risk assessments 699-706 risk/control questions 706 tests 705-6 spyware 570-5, 596-7, 601-4, 672-9 staff appraisals 7, 234, 314-16, 324-7, 399, 400-4, 413, 424-7, 713 concepts 424-7 control objectives 425 risk/control questions 425-7 stakeholders 22, 75-82, 90-4, 112-15, 464-75

added value definition 22 corporate governance 75-82, 90-4 environmental issues 464-75 types 91 standard audit programme guides (SAPGs) see also control self assessments concepts 10, 35-6, 40-74, 240-1, 285, 318, 345, 384, 400, 438, 454, 470, 488, 712-28 examples 41-5 format proposals 45-51 index 712-28 objectives section 46-7 practical uses 41-5, 240-1 purposes 46, 240-1, 719-21 questions 10, 35-6, 40-74, 240-1, 285, 318, 345, 384, 400, 438, 454, 470, 488, 712-28 risk/control section 45-6, 47-50 system interface section 46, 50 title page section 40-7 standard cost variances 268-70, 711 standards 3, 11-12, 16-19, 21-6, 76-80, 95-8, 115, 121-2, 120-5, 139-41, 171, 176, 182, 183-4, 214-17, 225, 229, 232-5, 272-5, 276-84, 287-9, 295, 319-42, 400-36, 465-75, 480-8, 515-41, 554-8, 652-4, 707-9 sedatso British Standards...; ISO... data retention and disposal 684-5 data transfers and sharing 515-23, 542-53, 636-44 emails 593-7 environmental auditing 465-75 financial information and reporting 272-4, 710-11 IIA 3, 11-12, 16-19, 21-6, 76-80, 95-8, 115, 121-2, 139-41, 171, 176, 214-17, 225, 229, 232-5, 570 IT 480-8, 493-5, 515-41, 581-4, 645-7, 652-4, 701-6 systems concepts 130-5 stock control concepts 7-8, 380-2, 392-5, 398, 714 control objectives 392-3 risk/control questions 393-5 stock and materials handling 6, 7-8, 11, 33-4, 42, 45, 51, 195-8, 240, 266-8, 321, 327, 362-6, 380-2, 383-98, 714, 723 see also inventories; spare parts... concepts 7-8, 383-98, 714, 723 out-of-stock situations 380-2, 392-5 overview 383-4 re-order levels 380-2, 393-5 SAPG 714, 723 storage aspects of information management 515–23, 544-53, 563-5, 586-9, 844 - 5see also removable media strategic objectives 96-8, 112-15, 178-81, 281-4, 291-316, 345-81, 388-92, 402-36, 438-52 environmental issues 467-8

strategic objectives (cont.) risk management 96-8, 112-15 strategic planning concepts 8, 71-4, 281-4, 291-316, 345-81, 438-42, 486, 489-92, 511-13, 582-4, 715, 725 IT 8, 486, 489–92, 511–13, 582–4, 715, 725 strengths and weaknesses analysis 71–4 subjective judgements, risk management 104 subsidiaries 3, 265, 276-84, 366-8 see also parent companies; remote operating units concepts 276-84, 366-8 cultural issues 277-84, 366-8 fact-finding programmes 277-8 marketing and sales 366-8 responsibilities 276-7 taxation 265, 366-8 'substantive testing' column of SAPG risk/control section 48-50, 56 succession planning, concepts 7, 399, 407, 408-10 Sudan 757, 827 suppliers 33-4, 91-4, 194-8, 286-316, 655-7 see also purchasing supply chains, environmental issues 468-75 sustainability reports 470-5 Sweden 627, 757-8, 828 Switzerland 758, 828 synergy 344, 469-75 system access controls see also access controls concepts 8, 487, 576-9, 642, 661-6, 667-70, 70 837 control objectives 577 definition 576, 837 risk/control questions 578-9 system administrators 576–9, 838 system development 487, 651-7, 699-706, concepts 651-7, 699-706, 845 control objectives 651-2, 655 795 costs and benefits analysis 651-4 risk/control questions 652-4, 656-7, 706 sourcing considerations 651, 655–7 spreadsheets 699-706 tests 652-7 system interface section of SAPGs 46, 50-1 system risk see also risk definition 52-3 systems concepts 130-5, 719-20 systems and operating software 8, 43-4, 64, 71-4, 487, 559-61, 570-5, 667-70 concepts 570-5, 667-70 control objectives 573-4 definition 570–1 risk/control questions 574-5 updates 570-5, 584 table PCs 585 tacit knowledge see also knowledge...

concepts 544-53, 838 tactical level of risk, concepts 51-2 Taiwan 758, 829 taxation 7, 33, 42, 51, 53-4, 91, 164, 166, 240, 244-5, 246-51, 261-6, 269, 311, 312, 354-5, 366-8, 416-24, 434-6, 442, 517-23, 713, 722 allowances 264-6 concepts 261-6, 311-12 control objectives 262, 264, 311-12 parent companies 366-8 returns 262-3, 264-6 risk/control questions 262-3, 264-6, 311-12 VAT 7, 51, 240, 246–51, 255–6, 261–3, 271–2, 312, 355, 713, 722 Taylor, Frederick 195, 198 TCP/IP 598, 707 teams 183-7, 200-1, 204-12 see also personnel technical activities, resourcing considerations 16-19 Telecommunications Regulations 2000 526, 646 telephones 28, 609, 840-1 temporary/short term staff 403, 409, 576-9 tendering 7, 9, 22-3, 44, 191-5, 220-1, 290-316, 651-4 716-17, 726-8 see also contracting concepts 9, 290, 299-304 on trol objectives 299–300, 302–3 definition 299 documentation 300-1, 302-5 procedures 9, 290, 299-302 risk/control questions 300-2, 303-4 termination of employment 400-4, 410, 425-7, 662-6, 841 - 2termination/contingency plan options, risk matrices 102 - 6terms of reference, IT function 493-5 'test' row in control matrices 58-74 test scripts, concepts 169-70 tests 14, 48-74, 125-7, 167, 168-73, 194-5, 330-2, 347-8, 442, 448-52, 652-60, 689-90, 705-6, 707 - 9concepts 168-73, 330-2, 347-8, 652-60, 689-90, 705-6, 707-9 contingency plans 658-60, 689-90 EDI 689-90 information flows 14, 125-7, 167, 168-73, 689-90 IT health checks 707-9 production/manufacturing quality controls 330-2 R&D 448-52 recruitment issues 407 spreadsheets 705-6 system development 652-7 Thailand 758, 829-30 three Es of effectiveness, efficiency, and economy, concepts 15-16, 19-21, 29-30, 77-9, 84, 85, 117-46, 215-35 three Es of equity, environment, and ethics, concepts 16, 21, 84-5, 463-75 time business process, concepts 35

time divisions, internal controls 137, 227-8 timeliness of reports 272-4, 283, 289, 291-316, 448-50, 514-23, 559-61, 710-11 timings, development project management 447-50 title page section of SAPGs 46-7 TJX Companies Inc. 672-3 Tokyo Stock Exchange 106 total quality management (TQM) see also continuous improvements; quality... concepts 178, 181-7, 330, 469-70 costs and benefits analysis 183-5 definition 181 risk/control questions 185-7 Towers, Stephen 180-1 Toyota 195 TQM see total quality management trade marks, distributors 366, 392 trades unions 91, 427, 431-2 training and development 7, 15-17, 64, 71-4, 90, 138, 144, 149, 204-5, 212, 218, 234, 241-2, 294-5, 314-16, 319-22, 324-7, 337, 339-42, 351-66, 370, 396-8, 399, 400-4, 408-13, 439-42, 448-50, 489-501, 518-23, 536-53, 572-5, 614-15, 657, 661-6, 699-706, 713 concepts 410-13, 439-42, 448-50, 699-706 control objectives 410-11 costs and benefits analysis 411-13 definition 410 489-92, 518-23, 536-53, 572-5, 583-4, 657 IT 661-6, 699-706 knowledge management 542-53 risk/control questions 411-13 transparency issues 85-6, 91-4, 516-23, 628 transport 8, 383, 384-8, 714 see also distribution Treadway Report 118, 157 see also Committee of Sponsoring Organizations treasury concepts 7, 33-4, 36, 51, 240-3, 713, 720-8 control objectives 241 risk/control questions 241-3 trends 16 Trinidad and Tobago 758, 830-1 'triple bottom line' objectives 464, 473 Trojans 672, 691-3 trust levels, CSAs 209-13 Turkey 759, 831 Turnbull internal control framework 117-18, 120, 128-9, 140-2, 144, 157-8, 170-1 see also UK, Combined Code on Corporate Governance turnover rates, personnel 149-50, 325-7, 401-4 'type' row in control matrices 58-74 Uganda 759, 831 UK 22-3, 109, 117-18, 120, 128-9, 140, 144, 157-8,

170-1, 176-7, 218-19, 245, 464, 466, 526, 533-5, 555, 581, 585-9, 590-2, 599, 609-10, 616-35, 658, 671-9, 681, 684-5, 759-60, 832-3

Combined Code on Corporate Governance 128-9, 140, 144, 157-8, 170-1, 176-7 Companies Act 2006 464, 473-5 Department of Trade and Industry 480 HM Treasury 218-19 Ukraine 759, 831-2 United States Code (USC) 154 university case study, cycles 37-9 untrue statements 151-77 up-to-date information data protection 619-26, 848 information management 514-23, 619-26 updates access rights 662-6 systems and operating software 570-5, 584 Uruguay 761, 833-4 US 117-28, 151-77, 465-6, 534-5, 581, 627, 671-3, 682-3, 684-5, 760-1, 833 see also Committee of Sponsoring Organizations; Sarbanes-Oxicy Act 2002 Environmental Protection Agency 465-6 USB memory cticks 566-7, 637 users screening processes 662-6, 667-70, 694-5 support services 487, 694-5 utilisation aspects of information management 515-23, 544-53 Uzbekistan 834 validation tasks 13-14, 241-75, 291-316, 405-7, 698, 702-6, 710-11 valuations interim payments 9, 44, 290, 308-10 inventories 266-8 value for money auditing (VFM), concepts 21-3, 230 - 3.353values 16, 34, 78, 84-5, 121-2 variables, systems concepts 131-5 variances 268-70, 278, 382, 395, 711 VAT 7, 51, 240, 246-51, 255-6, 261-3, 271-2, 312, 355, 713, 722 control objectives 262 registration numbers 262-3 returns 262-3 risk/control questions 262-3, 312 VBA 703 Venezuela 761, 834 verification tasks 13-14, 241-75, 291-316, 405-7, 468-75, 576-9, 662-6, 698, 702-6 versions of software 571-5 vertical integration 194 VFM see value for money auditing viability/competence assessments of contractors, concepts 9, 290, 295-7 Vietnam 762, 834 virtual private networks (VPNs) 585-9, 609-12 viruses 9, 43, 487, 497-501, 520-3, 563-9, 570-5, 583-4, 590-7, 601-4, 671-9, 691-3, 707-9, 841, 846

viruses (cont.) concepts 691-3, 846 control objectives 691-2 emails 691–3, 841 risk/control questions 692-3 vision 209-13 Voice over IP telephony (VoIP) 609

section 48-50

walkthrough tests 168-70 WANs see wide area networks warehousing and storage 7-8, 42, 51, 327, 383-4, 395-8,714 see also distribution; stock... concepts 395-8 control objectives 396 definition 395 risk/control questions 396-8 warranty arrangements 8, 43, 51, 343, 375–7, 381–2, 714 see also after sales support ve 76. concepts 8, 43, 51, 343, 375-7, 381-2 control objectives 375-6 risk/control questions 376-7 waste management 335-8, 463-75 'weakness to report' column of SAPG risk/control

websites 10, 35-6, 40, 44, 92-3, 218, 712, 729-834

Weinstock, Lord 97-8 welfare of personnel 7, 399, 400-4, 413-15, 457-60, 555-8,713 see also health and safety at work; security concepts 413-15, 457-60, 555-8 control objectives 413 whistleblowing policies 84-5, 121-2, 149 why-what-who-how questions, knowledge management 549-50 wide area networks (WANs) 489, 609-12, 693 Wiley website 10, 35-6, 40, 44, 712 Windows 570-1 Word tables 206 working capital 242-3 workshop/survey approaches to CSA 200-1, 204-12 worms 672 'WP' (working paper) column of SAPG risk/control section 48-50 Yemen 762, 834

Zimbabwe 762, 834

Indexed by Terry Halliday