ISSN 0961-9348

casg Computer Audit Specialist Group

JOURNAL

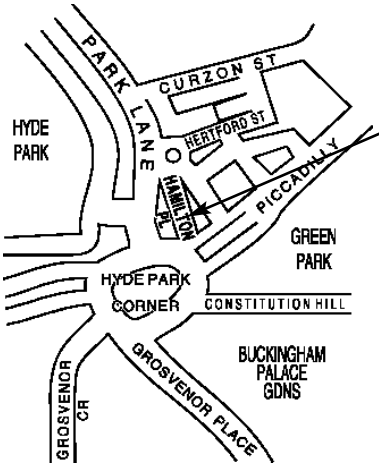
VOLUME 11 NUMBER 2 SPRING 2001

The British Computer Society

Programme for members' meetings 2000/2001 season

15th May 2001	**WAP Security** *The massive growth in the popularity of mobile phones, personal digital assistants and handheld PCs is a huge new market for anyone involved in e-commerce. We look at the security offered with WAP solutions.* **This meeting is free of charge to members and will be followed by the CASG AGM.**	Evening 16.00 for 16.30 KPMG

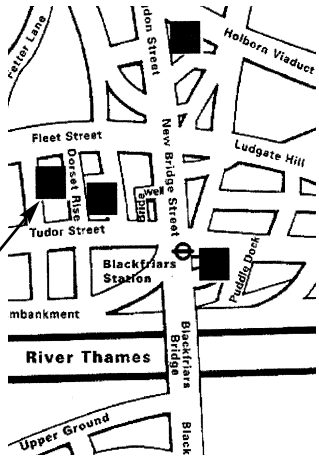
Venue for Full Day Technical Briefings



Royal Aeronautical Society,
4 Hamilton Place
London W1V 0BQ

Venue for Late Afternoon Meetings

KPMG
8 Salisbury Square
London EC4



Contents of the Journal

Technical Briefings		Front Cover
Editorial	John Mitchell	3
A Strategy for e-Risks Management – Refereed Article	George Allan & Tom Addison	4
The Web Page - Tapping into the Big Five	Andrew Hawker	10
Laser Printed Cheque Fraud	Bob Ashton	11
European Spreadsheet Risk Interest Group - Call For Papers		11
BCS CASG AGM Agenda		12
BCS CASG Management Committee Nominations		13
BCS Matters!	Colin Thompson	14
Report from the Cash Box	Mike Demetriou	16
Humour Page		17
Management Committee		18
Membership Application		19

ADVERTISING IN THE JOURNAL

Reach the top professionals in the field of EDP Audit, Control and Security by advertising in the CASG Journal. Our advertising policy allows advertising for any security and control related products, service or jobs.

For more information, phone John Mitchell on 01707 851454.

Editorial Panel

Editor
John Mitchell
LHS Business Control
Tel: 01707 851454
Fax: 01707 851455
Email: john@lhscontrol.com

Academic Editor
David Chadwick
Greenwich University
Tel: 020 8331 8509
Fax: 020 8331 8665
Email: d.r.chadwick@greenwich.ac.uk

Editorial Panel
Andrew Hawker
University of Birmingham
Tel: 0121 414 6675
Email: A.Hawker@bham.ac.uk

George Allan
University of Portsmouth
Tel: 02302 846415
Fax: 02392 846402
Email: george.allan@port.ac.uk

BCS Matters
Colin Thompson
British Computer Society
Tel: 01793 417417
Fax: 01793 480270
Email: cthompson@bcs.org.uk

Australian Correspondent
Bob Ashton
Queensland Audit Office
bobashton@hotmail.com

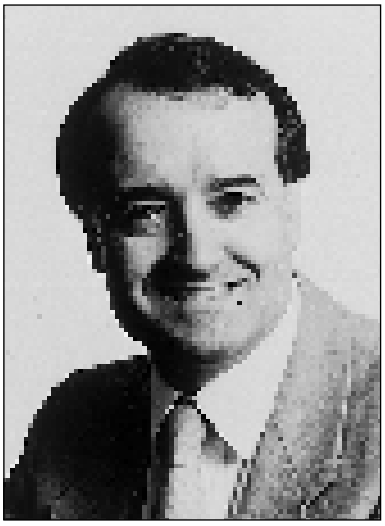
The **Journal** is the official publication of the Computer Audit Specialist Group of the British Computer Society. It is published quarterly and is free to members.

Letters to the editor are welcome as are any other contributions. Please contact the appropriate person on the editorial panel.

Editorial address:
47 Grangewood,
Potters Bar
Herts, EN6 1SL
Email: john@lhscontrol.com

Designed and set by Carliam Artwork, Potters Bar, Herts
Printed in Great Britain by PostScript, Tring, Herts.

EDITORIAL



Welcome to Bob Ashton as the newest addition to the editorial panel. Bob lives in Brisbane, Australia and it shows that the reach of the Group is truly world-wide. Over the years Bob has produced a variety of interesting articles for the *Journal*, many of them illustrating that life in the antipodes can be very strange indeed. I am always looking for correspondents for the *Journal*, so whether you live in Warrington or Wellington, if you are willing to produce one column per quarter for the *Journal* you too can receive official recognition. On the subject of official recognition, Janet Cardell-Williams, who typesets the *Journal* and is part-time administrator to the Group, was recently awarded a first class honours degree by the Open University. As someone involved in the academic arena, I hold OU degrees in high esteem, but I hold in even higher esteem those people who knuckle down for up to six years to get one. To get a first shows commitment of the highest order. My congratulations to Janet (and her family) for this high achievement.

In this edition you will find a paper by George Allan and Tom Addision. This is an example of international collaboration as George is based in Portsmouth and Tom lives in South Africa. Their subject is e-risks management which they examine from the viewpoints of the key players: retailer, consumer and developer. There is a call for papers for a spreadsheet symposium which is to be held in Amsterdam and Andrew Hawker introduces us to the web sites of the big five. Colin Thompson does his normal sterling job of updating us on our parent body and the humour page describes how you can tell if you are twenty-first century enabled.

In the last edition I mentioned that I was now ADSL enabled with my permanent Internet connection. Apart from the initial teething troubles the service has been available and stable for the last three months. So BT does have the capability of doing some things right. If you receive emails from me you may notice a little rosette attached to them. This shows that you can authenticate that the message is really from me by checking my digital certificate. Why would anyone want to masquerade as me? I get more paranoid as I get older . . . .

John Mitchell

The views expressed in the Journal are not necessarily shared by CASG. Articles are published without responsibility on the part of the publishers or authors for loss occasioned in any person acting, or refraining from acting as a result of any view expressed therein.

REFEREED ARTICLE

A Strategy for e-Risks Management

George Allan 1, Tom Addison 2.

1. University of Portsmouth , UK. George.Allan@port.ac.uk

2. University of The Witwatersrand, South Africa

Abstract

Risk management frameworks have been with us for twenty years, but little advance seems to have been made over the last two years. This cannot be allowed to continue with the current trends in e-Commerce and the associated risks to businesses using the Internet for secure transactions. This paper addresses the new issues introduced by e-Commerce using the www and Internet facilities. Four risk management frameworks are analysed and their strengths/weaknesses are compared with the new requirements of modern business modality. E-Futures risks are discussed in terms of threats, vulnerabilities and the constituent parts of an e-risks strategy are considered. Finally a five-point e-Futures risks strategy is proposed for debate.

1. Introduction

Computer development failures still occur with alarming frequency (Keil, 1995; Flowers, 1996, pp. 2-6; Pressman, 1994, pp. 14-23; Royce, 1970, pp. 1-9; Royce, 1998, pp. 5-20). In a survey of 600 firms Boehm (1991, pp. 32-41) reported that thirty five percent had at least one runaway project. With the advent of e-Commerce many of the risks in "conventional" systems are still prevalent, and a whole series of new issues, and hence new risks, have been introduced to compound the situation.

Companies embarking on e-Commerce projects will have concerns about security of transactions and confidential information. This paper highlights the risks to the retailer, consumer and developer. Section 3 summarises definitions of risk from the literature; section 4 describes risk management frameworks and section 5 outlines a risk strategy. Conclusions are drawn in section 6.

2. E-Commerce Benefits and Risks

Greenstein and Feinman (2000, pp. 1-2) define e-Commerce as the use of electronic transmission media in the buying and selling of products and services. They distinguish between EDI, e-Commerce and e-Business; EDI is used where a number of companies finance a closed system link between themselves for mutual trading; e-Commerce is open trading on the internet whereas e-Business goes beyond the actual buying and selling by distribution of further information and customer support which are seen as business activities. Technological advances and applications of the internet and www are opening further opportunities known as e-Futures.

The potential benefits of e-Futures include:-

Internet and web-based e-Commerce is affordable and available; more potential business partners can be reached quickly and easily over large geographic distances; procurement cost can be lowered (see General Electric case study in Greenstein and Feinman (2000)). Advantages for the consumer include the fact that individual customers can browse and select at home in comfort, shopping around can be international, crossing frontiers not previously possible with large amounts of information available on demand.

This paper has no scope to examine the associated risks in detail but companies concerned are recommended to take steps in terms of the issues in the following table.

Internal Issues	External Issues	Technical Issues
Trust	Sub-contractor performance	Encryption
Privacy	Physical security	Logical security
Legal constraints	Customer non-payment	Network reliability
Self repudiation	Non-receipt of payment	Server reliability
Conflict with other parties	Supplier reliability	
Scope creep	Ignoring scope creep	Scope creep
Ineffective web page design	Unawareness of web presence	Registration of web pages with search engines
Copyright issues	Copyright issues	Copyright issues
Transaction security	Transaction receipt and response	Instability of emerging technologies

Figure 1: Table of e-Commerce Risks

2.1 Risks for the retailer

Simply putting existing processes on-line is unlikely to result in success (Coomber, 2000, pp. 28 - 29). Brandtweiner (1998) discusses the concept of "disintermediation" a term for cutting out the middle-person. The Internet is making it possible for consumers to order directly from producers, cutting out retailers and wholesalers and consumers are using these initiatives.

Pereira (1998, pp. 318 - 320) demonstrates instances of how a person's personality is influenced by their culture, and this in turn influences their purchasing behaviour. Failure to recognise this in web page design will introduce the possibility of reduced retail turnover.

Many consumers are still hesitant to utilise electronic commerce because of risks perceived with electronic payment processes.

According to Salam, Rao and Pegels (1998, pp. 335 - 337) if the perceived risks are high then consumers will tend to use manual, facsimile or telephone transactions until they are convinced about adequate protection with electronic methods, particularly with regard to payments. They found that an increase in "institutional trust" significantly decreases consumer-perceived risk of transacting using the internet.

With conventional systems, payments are initiated when goods are received. Electronic procurement "evangelises" payment at the time of shipment of the goods, in order to reward the supplier and ease co-ordination (Coomber, 2000, pp. 28 - 29).

2.2 Risks for the consumer

Here we summarise the most common mistakes in commercial website design (Rosenfeld and Morville, 1998, p. xii) :-

- Using a business model and treating the Web as a marketing brochure
- Structuring website for the company not the user
- Page layout which includes wonderful graphics which look good but take ages to download on older machines
- Content authoring where text needs cutting and modularising
- Linking policy banning external links so as to trap the user
- Outsourcing the project management without co-ordination

The top seven turn-offs for visitors are :-

- Slow response from servers
- Sounds that play automatically
- Huge graphics
- No text alternative
- Broken links
- Requiring plug-ins
- Sites under construction
  (Navarro and Khan, 1998, p 494)

2.3 Risks to the Developer

The literature provides the risks associated with the development of computer systems and in 1991 Boehm surveyed experienced project managers and published a list of the top ten software risk items, namely:

- Personnel shortfalls
- Unrealistic schedules and budgets
- Developing the wrong functions and properties
- Developing the wrong user interface
- Gold-plating
- Continuing stream of requirements changes
- Shortfalls in externally furnished components
- Shortfalls in externally performed tasks
- Real-time performance shortfalls
- Straining computer-science capabilities

It is our contention that these traditional risk items are equally valid for e-projects of today. Not one of the above is redundant in the world of e-Commerce, e-Business. Unless computer developers begin to learn from yesterday's mistakes it is likely that the above will continue to apply to the e-Future projects of tomorrow.

Keil, Cule, Lyytinen and Schmidt (1998, pp. 76-83) conducted a study in three countries and found that the top eleven risk factors were:

- Lack of top management commitment to the project
- Failure to gain user commitment
- Misunderstanding the requirements
- Lack of adequate user involvement
- Failure to manage end user expectations
- Changing scope/objections
- Lack of required knowledge/skills in the project personnel
- Lack of frozen requirements
- Introduction of new technology
- Insufficient/inappropriate staffing
- Conflict between user departments
  (the ranking of these risks varied slightly from country to country).

We hold that six of these are applicable to e-projects; these are

- Lack of top management commitment to the project other than verbal support
- Users and web-builders misunderstanding the requirements and failure to recognise this
- Failure to manage end user expectations
- Changing scope/objections on both sides - user and web-builder
- Lack of required/ adequate skills in the project personnel
- Insufficient and/or inappropriate staffing

All projects have an element of risk which Boehm's Spiral Model takes into account at every stage of the project. Aspects of e-project risk will include time, money, people, changing requirements, legal consideration and unforeseen issues. As risks occur and change throughout an e-project they must be controlled and managed. Why take account of risks when contingency plans can be made to mitigate those risks? Risks which have been foreseen can be avoided, eliminated or minimised with the aim of reducing their potential to affect the project.

The following section summarises definitions of risk found in the literature.

3. Definition of Risk

In this section we attempt to establish what is meant by 'risk' in order to work towards an understanding of risk management.

Hertz and Thomas (1994) hold that risk refers to a lack of predictability about problem structure, outcome or consequence in

a decision or planning situation. They say that risk means both uncertainty and the result of uncertainty. The link between risk and uncertainty is upheld by many others. Krantz says that a risk is a combination of constraint and uncertainty (Tusler, 1996) and McFarlan (1981, pp. 142-150) suggests that risk is driven by the lack of information which leads to uncertainty.

Nidumolu (1995, pp. 191-219) holds that residual performance risk (the extent of difficulty in estimating outcomes such as benefits, costs and time-scales) is increased by project uncertainty and later suggests (1996, pp. 77-113) that requirements uncertainty is negatively related to control of the development processes and requirements uncertainty is positively related to risk.

Barki, Rivard and Talbot (1993, pp. 203-225) confirm that many definitions of risk include (a) the probability of an undesirable event and (b) the consequences of that event occurring usually expressed in financial term. They advise that both dimensions are evaluated quantitatively in many contexts. Boehm (1991, pp. 32-41) advises that risk exposure is usually defined by researchers in terms of multiplying the potential loss due to an unsatisfactory outcome by the probability of that unsatisfactory outcome.

Stump (1999, http://www.decisionproducts.com/preempt.html □http://www.decisionproducts.com/preempt.html) asserts that project risks are those forces that cause the plan to be diverted or, as McNamee (1997) puts forward, that risk is a concept that describes uncertainty in achieving goals. He claims that risk is never managed since risk is a conceptual property; it is the organisation that is managed in anticipation of the uncertainty characterised by risk.

Some writers use the terms 'risk factor' whereas others use the term 'uncertainty factor' but it is held that these are in essence the same thing (Barki et al, 1993, pp. 207). Academics tend to encourage a broad view incorporating multiple perspectives of risk (Kirsch, 2000, p. 288) because none of the existing risk management frameworks is all-encompassing. We would argue that a good reason for researchers to consider multiple perspectives is the uniqueness and diverse nature of individual IS developments. There needs to be differences in frameworks and the next section discusses four established frameworks for risk management in an attempt to focus on the risk environment during the development phases of e-Commerce systems.

4. Risk Frameworks

4.1 Chapman and Ward

Chapman and Ward (1997, pp. 121-122) advise that checklists are popular to drive the identification of risks and responses. These typically take the form of a table of individually identified risk drivers for which the impact, likelihood and exposure of each are expressed. The risk drivers such as financing arrangements, resource estimates, communications, project organisation and project design, are initially compiled by a small group of experienced project managers with a view to adding to the list as new experiences are learned. Chapman and Ward caution against over-reliance on checklists of this nature for various reasons including: risk drivers are assumed to be independent, risk drivers not on the list are likely to be ignored and individual entries may encompass a number of important but separate risk drivers implicitly. They hold the view that checklists should be referred to as "prompt" lists and used to stimulate deeper considerations such as the sources of the risks. This could be adapted for e-Futures projects. According to Chapman and Ward 'the essential purpose of risk management is to improve project performance via systematic identification, appraisal and management of project related risk'. In addition to that definition they provide the following figure to help us understand the process of managing risks.

By analysing these six phases we see that it is necessary to first define the nature of the e-project. Properly implementing the define stage will provide a clear understanding of the circumstances that

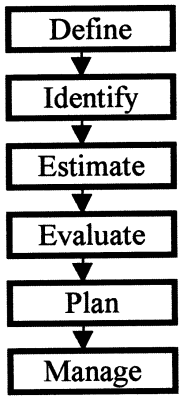


Figure 2: Steps of Risk Management

affect the project. This will prove critical in the next step which is to identify areas where risk may appear; every aspect of the project should be explored. According to Lewis (1998) brainstorming techniques can prove useful in this step by answering questions such as 'what could go wrong that would impact schedule, cost, performance or scope in the project?' The result of this process will be that key risks, threats and opportunities will be identified and reported. The next phase is to estimate the extent to which these risks can affect the performance of the project. The results of the estimate phase are used to evaluate the importance of each risk and make a prioritised list of risks, their possibility of occurrence and their effect on the project. These three steps constitute the risk assessment which is one of the most basic tools of risk management. After this information has been recorded, planning how to avoid or confront these risks can begin. Finally the manage phase, which is critical and should not be ignored, is concerned with monitoring and controlling the project by taking into consideration the implications of the risk management procedure.

The risk management procedure should be an ongoing process since it may prove necessary to revisit earlier stages in the process. As the e-project unfolds, risks that may have been ignored will appear and new dangers may be created. As a result, new plans have to be developed in order to deal with them. The three processes of identify uncertainties, analyse risks and, prioritise risks constitute the risk assessment process. Compare this with the following model devised by Boehm.

4.2 Boehm

Boehm (1991, pp. 32-14) categorises the practice of risk management as involving two primary steps, each of which has three subsidiary steps. The diagrammatic representation makes clear the processes involved. This model contains virtually all the salient points necessary for application to an e-project.

4.3 Schneider and Perry

Schneider and Perry (2000) present a risk management model based on four general actions to be taken depending on the impact (evaluation of the cost) and the probability of a threat.

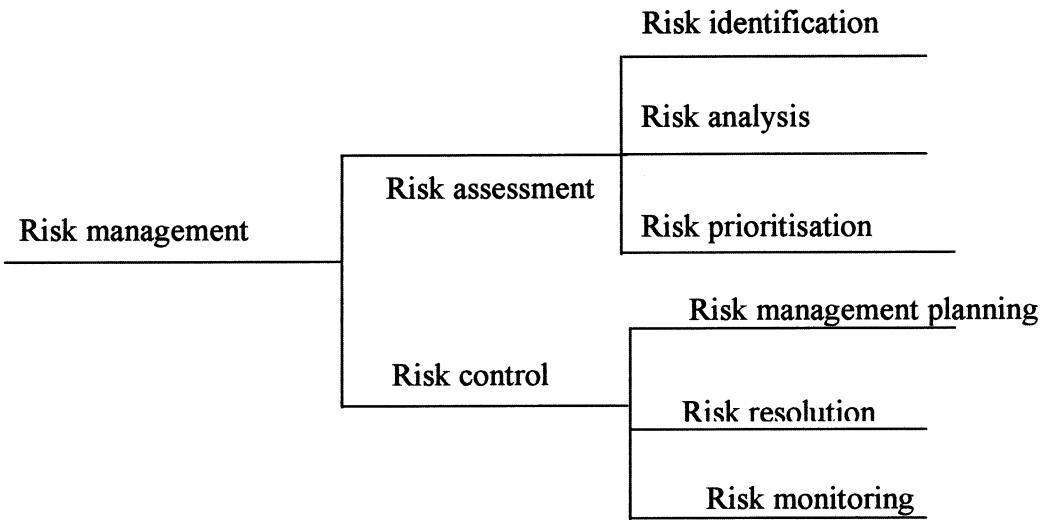


Figure 3: The Boehm Model

	High Probability
I	II
Contain and Control	*Prevent*
Low Impact	**High Impact**
(costs)	**(costs)**
III	IV
Ignore	*Insurance or backup plan*
Low	**Probability**

Figure 4: Schneider and Perry Risk Management model

This model can be applied to protecting e-Commerce from physical and electronic threats. Schneider and Perry suggest examples including impostors, eavesdroppers and thieves. The strength of this model is in its simplicity and applicability to e-Future projects. A possible weakness is in how a e-project manager might interpret and apply the four quadrants.

5. E-Risk Strategy

A risk strategy is necessary for all e-Commerce using web sites and the level of security adopted will depend upon whether the web site is for use as an intranet or extranet, or for the Internet. If the necessary knowledge is unavailable in-house, it is recommended that a risk expert should be consulted. A more detailed examination of the security issues can be found in Ahuja (1996, pp. 11 – 25, 207 – 302).

5.1 Birch and McEvoy

The Birch and McEvoy alternative definition of risk (1996, pp.261) consists of three elements; a threat which is something that will have an adverse effect on the organisation; a vulnerability as a characteristic of the physical system which allows a threat to be exploited. A risk which exists when a threat and a vulnerability overlap and can hence be specifically identified. For any given e-project the threats are catalogued according to integrity (TI), confidentiality (TC) and availability (TA) of each information asset identified. First identify the problem areas in the system, then assign impacts to the threats in the threat catalogue. A system's vulnerabilities can then be catalogued together with a probability of each vulnerability being exploited. Vulnerability analysis is performed by cataloguing all vulnerabilities then assigning a probability to each but how the probabilities are to be calculated will depend on the specific issues within the e-project.

Examples are given of a vulnerability analysis and a risk analysis but no explanation of the weights given to assigned impact factors. They claim that now the threats and vulnerabilities have been catalogued "a risk becomes something very precise and specific". This is arguable in the light that there are no clear guidelines for setting standards on the impact factors or the probability calculations.

A countermeasure reduces the exposure either by reducing vulnerability (the probability of attack) or reducing losses associated with a threat (reducing impact).

It is felt that this method would form the basis of a risk strategy for e-projects when combined with relevant parts of the aforementioned three frameworks. Other issues important to an e-risk strategy are discussed below.

5.2 Communicating Risk

We believe that it is important to emphasize the importance of communicating risks to all stakeholders concerned with an e-project. The identification of risks, derived through the processes described above should not stay "secret". It is desirable for any team member concerned to be aware of them. The exchange of information among team members will create a better understanding of the e-risks that may be encountered. As a result, the morale of the team members will be enhanced.

5.3 Risk Avoidance

It is better to avoid risk than to manage it claims Levine (1995, pp. 30-32). This is a valid viewpoint because avoiding risks by taking appropriate actions from the beginning of a project can save time and

effort later. One way of avoiding risk is to authorise work step by step (Lock, 2000, pp. 57-58). By giving clear instructions about the tasks that are assigned to each group member the risks of misunderstanding and confusion can be avoided.

However, it is not always possible to avoid completely some risks such as those in e-projects involving the evolution of web pages without a recognised design stage. In this case, proper monitoring during the implementation could identify risks that may not have been predicted earlier and provide the opportunity for containment. Where e-risk avoidance is not possible the risk should be minimized using a combination of the above techniques.

5.4 Risk Elimination

It is unlikely that risk can be completely eliminated from a project at the outset. However, some predicted risks may disappear as the project moves on. A certain amount of risk is acceptable as long as the risk is identified, owned, accepted and controlled.

5.5 Risk Strategy Planning

The whole process of risk management needs careful planning and control from start to finish. The process should be monitored at every step and risks evaluated throughout. In this way the following five-step strategy could be adopted:-

1. Use the concepts of threat and vulnerability from Birch and McEvoy.
2. Identify and analyse the threats and vulnerabilities using the framework of Boehm with attention to Chapman & Ward.
3. Evaluate the impacts of threats and vulnerabilities using the Schneider & Perry quadrants.
4. Priorities and plan according to Chapman & Ward.
5. Control and manage the risks according to Boehm.

6. Conclusions

In this paper we have summarised four established risk management paradigms which were derived for development of traditional computer systems. We contend that although the development processes of e-projects are very different from former computer projects and this brings additional risks, there are still many risks in e-Futures project development similar to those in conventional systems development.

It is our conclusion that today the majority of causes of risk in developing e-Futures applications are similar to those found in software projects over the last quarter of a century. The lessons are the same based on the fundamental principles of realistic estimates periodically revised in line with latest available information and working very closely with stake-holders at all levels be they end users, finance/budget people, middle and higher management, other projects and outside contractors. An adaptation of the risk frameworks are equally applicable to the modern work of developing www sites, intranets and e-Commerce applications.

Bibliography

Ahuja, V., 1996, *Network and Internet Security*, Academic Press Ltd, London

Barki, H., Rivard, S., and Talbot, J., 1993, 'Toward an assessment of Software Development Risk', *Journal of Management Information Systems*, Vol. 10, No. 2, pp. 203-225

Birch, D.G.W., and McEvoy, N.A., 1996, "Risk Analysis for Information Systems", in: *Investing in Information Systems: Evaluation and Management*, (L. Wilcocks, ed.) Chapman & Hall, London

Boehm, B.W., 1991, ìSoftware Risk Management; Principles and Practices", *IEEE Software*, January, pp. 32-41

Brandtweiner, R., 1998, "Risks and Challenges for Retailers: The Value Chain Transformation - A European Perspective", http://www.isworld.org/ais.ac.98/proceedings/track06/brandweiner.pdf accessed 06 June 2000

Chapman, C., and Ward, S., 1997, *Project Risk Management: Processes, Techniques and Insights*. J Wiley and Sons, Chichester

Coomber, R., 2000, "Last Post for the Paper Purchase", *Computing2*, June

Flowers, S., 1996, *Software Failure : Management Failure*, J Wiley and Sons, Chichester

Greenstein, M. and Feinman, T.M, 2000, E*lectronic Commerce: Security, Risk Management and Control*, Irwin McGraw-HIll, New York

Hertz, D. and Thomas, H., 1984, *Practical Risk Analysis*, J Wiley & Sons, Chichester

http://ourworld.compuserve.com/homepages/robert_tusler/principl.htm accessed 10 March 1999

Keil, M., 1995, "Pulling the Plug: Software Project Management and the Problem of Project Escalation", *MIS Quarterly*, December, pp. ***-***

Keil M, Cule PE, Lyytinen K and Schmidt RC 1998. A Framework for Identifying Software Project Risks. *Communications of the ACM*, November, Vol. 41 No. 11, pp. 76-83

Kirsch, L.J., 2000, "Software Project Management: An Integrated Perspective for an Emerging Paradigm", in: *Framing the Domains of IT Management: Projecting the Future through the Past*, (R.W. Zmud, Ed.) Pinnaflex Inc, Cincinnati. Also available at http://www.pinnaflex.com/pdf/framing/CH15.pdf accessed 7 June 2000

Levine, H., 1995, "Risk Management for Dummies: managing schedule, cost and technical risk and contingency", *Project Management Network*, October, pp. 30-32

Lewis, J., 1998, *Mastering Project Management*, McGraw-Hill, UK

Lock, D., 2000, *Project Management*, 6th edition, Gower, England

Lyytinen, K., Mathiassen, L., and Ropponen, J., 1996, "A framework for software risk management", *Journal of Information Technology*, Vol. 11, pp. 275-285

McFarlan, F.W., 1981, "Portfolio Approach to Information Systems", *Harvard Business Review*, Sep-Oct, pp. 142-150

McNamee, D., 1997, "Assessing Risk Assessment", available from: http://www.mc2consulting.com/riskart2.htm accessed 9 March 1999

Navarro, A., and Khan, T., 1998, *Effective Web Design*, Sybex

Nidumolu, S., 1995, "The Effect of Co-ordination and Uncertainty on Software Project Performance: Residual Performance Risk as an Intervening Variable," *Information Systems Research* Vol. 6, No. 3, pp. 191-219

Nidumolu, S.R., 1996, "Structural Contingency and Risk-Based

Perspectives on Co-ordination in Software-Development Projects," J*ournal of Management Information Systems,* Vol. 13, No. 2, Fall, pp. 77-113

Pereira, R.E., 1998, "Cross-Cultural Influences on Global Electronic Commerce", in Proceedings of the AIS 98 conference, Baltimore, Maryland, August. Available at http://www.isworld.org/ais.ac.98/proceedings/track06/pereira1.pdf accessed 6 June 2000

Pressman, R. S., 1994, *Software Engineering - A Practitioner's Approach*, McGraw-Hill, Maidenhead

Rosenfeld, L., and Morville, P., 1998, I*nformation Architecture*, O'Reilly, UK

Royce, W., 1998, *Software Project Management - A Unified Framework*, Addison-Wesley, Massachusetts

Royce, W. W., 1970, "Managing the Development of Large Software Systems: Concepts and Techniques", *Proceedings of WESCON*, pp. 1-9, ISSN I-005-6650

Salam, A.F., Rao, H.R., and Pegels, C.C., 1998, "An Investigation of Consumer-perceived Risk on Electronic Commerce Transactions: The Role of Institutional Trust and Economic Incentive in a Social Exchange Framework" Available at http://www.isworld.org/ais.ac.98/proceedings/track06/salam.pdf accessed 6 June 2000

Schneider, G.P., and Perry, J.T., 2000, *Electronic Commerce*, Course Technology-ITP, Canada

Stump, E.J., undated, "Pre-emptive Project Risk Management", http://www.decisionproducts.com/preempt.html accessed 10 March 1999

Tusler, R., 1996, "Project Risk Management Principles", available from: □ http://ourworld.compuserve.com/homepages/robert_tusler/principl.htm accessed 10 March 1999

GUIDELINES FOR POTENTIAL AUTHORS

The Journal publishes various types of article.

Refereed articles are academic in nature and reflect the Group's links with the BCS, which is a learned institute governed by the rules of the Privy Council. Articles of this nature will be reviewed by our academic editor prior to publication and may undergo several iterations before publication. Lengthy dissertations may be serialised.

Technical articles on any IS audit, security, or control issue are welcome. Articles of this nature will be reviewed by the editor and will usually receive minimal suggestions for change prior to publication. News and comment articles, dealing with areas of topical interest, will generally be accepted as provided, with the proviso of being edited for brevity. Book and product reviews should be discussed with the appropriate member of the editorial panel prior to submission. All submissions should either be on double spaced, single-sided A4 paper, e-mail, or on PC format diskette in Microsoft Word, Word-Pro, or ASCII format. Electronic submission is preferred.

Submissions should be accompanied by a short biography of the author(s) and a good quality monochrome photograph, or electronic image.

Submission Deadlines

Spring Edition	7th February
Summer Edition	7th May
Autumn Edition	7th August
Winter Edition	7th November

The Web Page

Tapping into the Big Five

Andrew Hawker

University of Birmingham

The "big" accounting firms are now all truly giant-sized. They each have a global presence, and numerous off-shoots in business services and consulting. Their web sites are all well-resourced, well-engineered and user-friendly. They do, however, occasionally show signs of strain in trying to maintain their local identity *and* at the same time link together their materials from around the globe.

All of the firms can be reached via a "co.uk" address, and these are listed at the end of this page. Once aboard the web site, however, you may well find yourself being flipped to hosts and mirror sites in different parts of the world. Trying to pin down URL's for references is well nigh impossible, and so none are quoted in this article. Instead, the aim is to provide distinctive key words, which will help surfers in carrying out searches. Unfortunately, although all the sites offer search facilities, these are sometimes a bit hit-and-miss in terms of the range of pages being searched. You will also quite often find that if you look at one particular reference in full, you cannot easily get back to the list of results generated by the search engine.

The firms are understandably reluctant to put very many of their "crown jewels" onto the web. They cannot afford to reveal too many details from their databases and methodologies, since these are an important source of fee income. At the same time, they need to impress potential customers with their expertise. Most of the material on their sites is therefore either deliberately superficial (to act as a "teaser" to would-be clients) or carries a message which is likely to stimulate business. For example, a survey may point up the lack of security or financial controls in systems. Examples of such surveys can be found at Ernst & Young (Information Security Survey, 2001) and KPMG (Information Security Survey, 2000, issued in April of last year). In both cases, executive summaries giving many of the key statistics can be downloaded in Adobe format. The Ernst & Young survey is referenced via its "Library page". This permits the user to browse some other, related, reports by selecting "fraud" as a Business Area. (Is fraud a Business Area? What exactly are Ernst & Young trying to tell us?)

Finding the KPMG survey calls for a bit more detective work, as it does not reveal itself in a simple site search. It is necessary to look at the publications referenced on the page for Assurance Services. Some other reports on fraud are available, via the Forensic and Litigation Services page.

The international dimension is illustrated by PriceWaterhouseCoopers. In July 2000, PWC began a monthly Global Risk Newsletter, which contains a mixture of technical hints ("12 tips to make NT secure", and so on) together with news items from around the world. Although this is presented in English and quite often contains UK references, it is actually edited in PW's offices in Thailand. The PW pages also contain some items of more specialised interest. For example, if you want a good summary of the way countries have tried to establish rules for exporting cryptography over the past few years, take a look at the presentation slides prepared for a security conference in 1999 by Geoffrey C. Crabow. These can be found at the PW Cryptographic Centre of Excellence, under "CCE Presentations".

Deloittes also emphasises its international credentials. Its report entitled "Global Perspective: Risk e-Business" is in Adobe format, and covers quite a number of security issues. It includes an interesting US perspective on the development of data protection in this country, and elsewhere in Europe.

Andersen's have some survey results on-line which should be of particular interest to CASG members, as they are based on responses from 60 Heads of Internal Audit. The survey is entitled "Internal audit and technology in the new economy", (May 2000). Two thirds of companies apparently believe that the need to audit IT will grow rapidly over the next three years, and that this will exacerbate an already severe deficit in the staff skills which are needed. This could be useful to drop into a conversation about your career prospects?

Finally, the URL's for each of the five firms in the UK:

Arthur Andersen	www.arthurandersen.co.uk
Deloitte & Touche	www.deloitte.co.uk
Ernst & Young	www.ernsty.co.uk
KPMG	www.kpmg.co.uk
PriceWaterhouseCoopers	www.pwcglobal.co.uk (note: this still requires you to select the UK as your preferred country. To go directly to the UK site, use **ww.pwcglobal.com/uk)**

Laser Printed Cheque Fraud

Bob Ashton

Brisbane's Courier Mail of 1 February reported a novel fraud involving cheques which had been produced on a laser printer. The fraudsters were able to lift laser printed words and figures from the surface of the cheque using a laser of their own and then replaced them with a greater amount using a standard laser printer. In the case reported, $28,000 had been added to a $700 cheque.

It cannot be expected that such altered cheques will be identified by visual inspection as the cheque number and signature remain intact and the altered text has exactly the same appearance as the original.

It may be that laser printed cheques will have to be regarded with the same degree of horror which auditors once reserved for pencil written cheques.

Certainly, traditional detective controls, such as regular and timely bank reconciliations are just as valuable as they ever were.

A spokesman for a major bank indicated that 'laser fraud' was a significant problem and had first appeared 18 months ago.

European Spreadsheet Risks Interest Group

CALL FOR PAPERS

"CONTROLLING THE SUBVERSIVE SPREADSHEET"

Second International EuSpRIG Conference on Spreadsheet Risks, Development and Audit Methods

Vrieje Universiteit, Amsterdam, July 5-6 2001

EuSprig is issuing a **Call for Papers** for the 2001 conference on Spreadsheet Risks, Development and Audit Methods.

The theme of the 2001 conference is "Controlling the Subversive Spreadsheet". The programme will concentrate on spreadsheet development and audit tools and methods

We are seeking papers (up to 5000 words) from academics and management summaries (up to 2000 words) from academics and business people – Spreadsheet users, developers, auditors and accountants – who can contribute to the prevention, detection and correction of errors in spreadsheet models and applications.

Timetable

Submission of draft papers	31 March 2001
Notification of acceptance	30 April 2001
Submission of finalised papers	20 May 2001

Submission Instructions

Visit www.gre.ac.uk/~cd02/eusprig or contact David Chadwick, Information Integrity Research Group, University of Greenwich (D.R.Chadwick@greenwich.ac.uk)for details of formatting, handling of illustrations etc. Drafts / Abstracts (in English) should be emailed to David Chadwick in Microsoft Word or Rich Text Format.

Programme Committee

David Chadwick (Chair)	University of Greenwich
Professor. Margaret van Biene-Hershey	Vrije Universitat, Amsterdam
Ray Butler	H M Customs & Excise, Liverpool
Luc Kordelwerk	Dexia Bank, Belgium
Robert Li	KPMG London
Professor Ray Panko	University of Hawaii
Barry Pettifor	PriceWaterhouseCoopers, London
Harmen Ettema	PriceWaterhouseCoopers, Amsterdam
Graham MacDonald	HM Customs & Excise, Reading

British Computer Society

Registered Charity No. 292786

THE ANNUAL GENERAL MEETING

of the

COMPUTER AUDIT SPECIALIST GROUP

of

THE BRITISH COMPUTER SOCIETY

to be held on

TUESDAY 15 MAY 2001

immediately after the members' meeting

at KPMG's offices, 8 Salisbury Square, London, EC4Y 8BB

AGENDA

1. Approval of the minutes of the AGM held on 16 May 2000
2. Chairman's Report
3. Treasurer's Report
4. Election of Officers
5. Election of Honorary Auditor
6. Appointment of Committee
7. Plans for 2001/2002
8. Co-operation with Information Security Specialist Group
9. Any other business

The meeting will follow the members' meeting on WAP Security. There is no charge for attendance at the AGM which is open to all CASG members irrespective of whether or not they attend the members meeting on the day.

Notice of the Annual General Meeting of the Computer Audit Specialist Group of the British Computer Society

The AGM for 2000/2001 will take place on Tuesday 15 May 2001 at KPMG's office, 8 Salisbury Square, London, EC4Y 8BB, immediately after the afternoon's members meeting on WAP Security.

An Agenda for the meeting is shown on the facing page. There is no charge for the meeting or the AGM which are both open to all CASG members. Members may attend the AGM irrespective of whether or not they attend the members meeting.

Nominations for the Management Committee

As usual at this time, we are seeking nominations for the Group's Management Committee. We hold about 4-6 committee meetings a year, usually held at the end of Technical Briefing or Members Meetings. Each committee member is allocated a specific role and the Committee is assisted by an Administrator. The Committee is not a 'clique' and we would very much welcome new people, new ideas and lots of enthusiasm! Names of the 2000/2001 Committee Members are given below.

If you would like to discuss any committee posts please either contact John Bevan (Tel: 01992 582439 - e-mail: john_bevan@ntlworld.com) or any other committee member whose details are given in the *Journal*.

Please do not be concerned about Committee vacancies, just apply using the nomination form below to Raghu Iyer, Secretary, whose address can again be found in the *Journal*.

Co-operation with Information Security Specialist Group (ISSG)

Following discussions with the Chairman of the ISSG, the committees of both CASG and ISSG feel that there are significant benefits and no disadvantages in working closely together. Merger of the two groups is no longer under consideration but it is proposed that we should co-ordinate our annual events and produce a joint programme card that will enable both sets of memberships to attend the combined programme of events at member rates. Consideration is also being given to producing the *Journal* as a joint publication, with ISSG contributing to the contents as well as costs as appropriate.

THE MANAGEMENT COMMITTEE FOR 2000/2001

Chairman	John Bevan	Consultant
Secretary	Raghu Iyer	KPMG
Treasurer	Mike Demetriou	Consultant
Journal Editor & past Chairman	John Mitchell	LHS Business Control
Membership Secretary	Jenny Broadbent	Centrica plc
Meeting organisers	Peter Murray	Consultant
	Paul Plane	Dai-Ichi Kangyo Bank
Marketing	Steve Pooley	Consultant
Academic Relations	David Chadwick	Greenwich University
Webmaster	Siobhan Tracey	Booker plc

THE BRITISH COMPUTER SOCIETY

COMPUTER AUDIT SPECIALIST GROUP

Nominations for the 2001/2002 Committee

Position: _____

Nominee: _____

Proposer: _____

Seconder: _____

Signature of Nominee agreeing
to serve on the Committee _____ Date: _____

BCS MATTERS!

Colin Thompson
BCS Deputy Chief Executive

Colin Thompson, BCS Deputy Chief Executive, reviews some of the current BCS news items. Further information on these or any other BCS related issues may be found on the BCS Web site ("http://www.bcs.org.uk/")

Information is also available from Customer Services at The British Computer Society, 1 Sanford St, Swindon SN1 1HJ (e-mail to marketing@hq.bcs.org.uk)

Colin Thompson, BCS Deputy Chief Executive, provides a view from HQ on some of the major current issues for the Society.

THE AGENDA FOR CHANGE

The programme to modernise and revitalise the BCS took a further step forward in February when Council gave approval in principle to a new 3-year strategic plan

The plan is the culmination of the most extensive consultation exercise in the Society's history. Over the past year detailed survey questionnaires have been completed by around 3000 members and 400 non-members. Many others have been involved in detailed interviews and focus group sessions. The message from all that activity is clear and consistent, although not always comfortable; IS practitioners want a professional body and want it to succeed, but they see the need for the Society to make significant changes if it is to meet the real needs of our community and profession. In particular, the consultation tells us that members want a BCS that is:

- Sharper, more business-like and less bureaucratic
- Much more visible and influential; recognised as a leader of the IS community and profession;
- More effective in promoting the need for professionalism and the value of professionally qualified practitioners.
- More in touch and in tune with its members, particularly those in the early stages of their professional career
- Focused more on the needs of its members and customers, with performance measured more in terms of their perception of value.
- More relevant to the needs of today's professionals, particularly in terms of the need to maintain competence and to keep abreast of best practice in a rapidly changing world.

These requirements are reflected in the proposed plan which identifies 5 key strategic areas as the focus of BCS activity for the next 3 years:

1. Making the Society relevant, visible and influential.
2. Establishing effective engagement with IS professional communities.
3. Establishing a positive track record for the quality and value of the services we provide to members.
4. Enhancing the Society's professional programmes to meet the needs of business and practitioners
5. Sustaining the foundation of the Society's finances.

The new plan is intended to change not only what the BCS does but, crucially, the way in which it performs and behaves, affecting the whole basis of the relationship it has with all parts of its constituency. It builds on the significant gains achieved over the past 5 years which provide a sound foundation for the new plan, particularly in terms of the investment that will be required to fund the new improvements.

The plan submitted to Council shows a series of more detailed, measurable objectives supporting the 5 strategic targets, including three key enablers scheduled for very early delivery:

- A new BCS brand strategy
- A significant improvement to our Web-based capability
- A new organisational structure

THE BRAND STRATEGY

The new brand strategy, established with the advice and support of the specialist agency Clark Hooper Momentum, is designed to simplify and clarify both the visual image and the message of the BCS in support of the first of the key objectives – to make the Society relevant, visible and influential.

The new brand, scheduled for launch in June 2001, will reflect a more up-to-date image of the BCS and will provide a new logo that will be available for use by members and partner organisations.

The branding strategy will apply to all parts of the Society and detailed guidelines will be published to ensure the consistent use of the brand by HQ, Branches and Specialist groups.

THE BCS WEB INITIATIVE

The creation of an up-to-date, comprehensive web-based service is central to all the objectives shown in the new 3-year plan. The web will not, of course, replace more traditional means of communication, but the Society recognises that it can only deliver the level of service, communication and engagement needed for the future by exploiting fully the potential of the internet and the Web.

As with the new brand strategy, the work on the upgrade to the BCS web facility is already underway. The Society is committed to a major investment programme and the first fruits of that investment will be visible to members and customers during the current year.

THE NEW ORGANISATIONAL STRUCTURE

Implicit in the plan is the recognition that the Society of tomorrow cannot be created by the organisation of today. A new structure is essential if we are to establish new modes of behaviour and to change from what some regard as a cosy club to an organisation with its roots well established in its member and customer base.

To meet this need, the plan proposes a new organisation based on four Boards responsible for deliverable programmes and three Fora designed to engage members in the life of the Society.

BCS MATTERS!

The main elements of the new structure are

BOARDS	FORA
Member Services	Engineering
Qualifications and Standards	Management
External Relations	Education
Knowledge Services	

Each Board and Forum will be headed by a Vice President. Boards will have an area of responsibility with deliverable results. Fora, on the other hand are intended to provide open flexible arrangements to encourage participation and to draw in working professionals. They will need to find new ways of working that are compatible with modern lifestyle and which enable involvement in the life of the Society without the need to give up large amounts of time for meetings during the working day.

It is the intention that the new structure should be operational immediately following the AGM in November this year.

There are no plans to change the operation of Branches and Specialist Groups (although both will report to the Member Services Board under the new structure), nor is it intended to change the representation on Council at this point.

Further information

Further information on the changes outlined above will be distributed to members during the next few months and will be publicised on the BCS web site. In the meantime, comments are welcome from both members and other interested parties (preferably by e-mail to **cthompson@bcs.org.uk)**

CLAUSE 59

A recent press release issued by the Society, with the support of the BCS Healthcare Informatics community, could be seen as an example of the more proactive, hard hitting style that will be required if the BCS is to achieve the visibility and leadership that members want to see.

The release concerns clause 59 of the Health and Social care Bill which will, if it becomes law, give the Secretary of State discretion over the way in which patients' personal medical information is used and shared between medical organisations.

Mike Hainbridge, chairman of the Primary healthcare SG, was instrumental in raising the issue and is quoted in the release in the following terms:

"We are particularly concerned that this provision could undermine the excellent progress that has been made towards the greater use of electronic clinical information to deliver good patient care and to drive appropriate commissioning decisions. We believe that Clause 59 has no place in proposed legislation which is in other respects soundly based, and it should be withdrawn".

As we move forward with the new 3-year plan – particularly with the objective to make the Society *relevant, visible and influential* - we shall be looking for other opportunities for the BCS to take an early lead on issues of legitimate concern to our community. So, if you identify an issue within your area of activity that needs raising, contact Anna Duckworth at BCS HQ (e-mail: aduckworth@hq.bcs.org.uk)

The full press release can be found on the BCS Web site (http://www.bcs.org.uk/news/2001/health.htm)

BCS PUBLICATIONS

It has been some time since I mentioned BCS publications in this column, during which time there have been some significant additions to the range. In particular the very popular range of guidance reports has been extended and now comprises 6 titles:

- E-Commerce – a World of Opportunity
- Data protection – Everybody's Business
- E-Commerce – Doing Business Electronically
- Data protection – Implementing the Legislation
- Disability Discrimination Act – Access for All
- Intellectual Property Rights in Software

The reports are priced at £15 for BCS members (£20 for non-members) but if you buy three, you can choose a fourth free.

ECDL Guides

The European Computer Driving Licence is a major success story for the BCS. There are now 140,000 people in the UK who have gained their licence or are currently studying, and the number of students is growing rapidly. To meet the demand for high quality relevant training material, the BCS has produced a new set of guides designed to complement the ECDL syllabus. Published by Springer Verlag, each study guide contains a set of clearly defined objectives that relate directly to the syllabus, and takes the student through all the knowledge areas and skills required to understand and pass the corresponding ECDL module. The books are priced at £9.95 each or £65 for the complete 7 volume set.

Further information from Springer Verlag (http://www.springer.co.uk)

The BCS Review 2001

The BCS Review is now an established part of the annual publishing cycle and the new book, the BCS Review 2001, maintains the standard set in previous years. The article index shows a wide range of subjects of current interest, including:

- IT Strategy
- IT Security
- Professional Issues
- Data Storage
- IT Services
- Multimedia & Electronic Publishing
- Application Development Tools
- IT Training
- E-Commerce
- IT Employment
- Mobile Computing
- Information management

Further information from Customer Services at BCS HQ (marketing@hq.bcs.org.uk)

AND FINALLY. . . . . .

We have a new Marketing Director. Jeremy Comley joined the HQ team at the beginning of January to fill a seat that had been vacant for over 9 months. Jeremy is already beginning to make his mark on BCS marketing and communications and will be managing the launch of the new brand strategy over the next few months. Jeremy can be contacted by e-mail at jcomley@hq.bcs.org.uk

Report from the Cash Box

Mike Demetriou

Commentary

The group made a surplus of nearly £3,000 from its activities in 2000, despite the inclusion of over £5,000 of late invoice payments from the previous year.

This was an excellent performance and brought us back from a loss situation in 1999/2000 into a healthy profit. This change was largely due to a successful programme of Technical Briefings covering the hot topic of Internet & E-Commerce risk & security. Our revised administration procedures have also proven to be effective in that our membership numbers are no longer declining and we were able to include all material income and expenses in the correct year's accounts.

Our cash balances are still very healthy at £40,481 and the committee is actively looking at ways of productively utilising these.

Income and Expenditure Account for the Year Ended 30 April 2000

	1999/00 £	1998/99 £
Income		
Technical Briefing Sessions & other meetings	20,206	10,156
Subscriptions	4,015	4,225
Interest on Bank Accounts	837	1,362
Journal Advertising	176	293
Other Income		5
Prior Year Items		
	25,234	16,041
Expenditure		
Technical Briefing Sessions & other meetings	11,307	6,274
Journal	4,419	5,148
Printing, Postage & other Administration Expenses	1,122	3,489
Prior Year Items	5,475	2,963
	22,323	17,874
Profit/Loss for the Year	2,911	(1,833)

Fund Balance	£
Fund Balance at 1st May 1999	37,570
Add 1999/2000 profit	2,911
Fund Balance at 30 April 2000	40,481

HUMOUR PAGE

SIGNS YOU LIVE IN THE YEAR 2001

(Two dozen examples that the millennium has finally got to you . . . . .Ed)

1. You just tried to enter your password on the microwave.
2. You have a list of 15 phone numbers to reach your family of three.
3. You call your son's beeper to let him know it's time to eat. He emails you back from his bedroom, "What's for dinner?"
4. Your daughter sells Girl Scout Cookies via her web site.
5. You chat several times a day with a stranger from South Africa, but you haven't spoken with your next door neighbour yet this year.
6. You check the ingredients on a can of chicken noodle soup to see if it contains Echinacea.
7. Your grandmother asks you to send her a JPEG file of your newborn so she can create a screen saver.
8. You pull up in your own driveway and use your cell phone to see if anyone is home.
9. Every commercial on television has a website address at the bottom of the screen.
10. You buy a computer and 6 months later it is out of date and now sells for half the price you paid.
11. Leaving the house without your cell phone, which you didn't have the first 20 or 30 years of your life, is cause for panic and you turn around to go get it.
12. Using real money, instead of credit or debit, to make a purchase would be a hassle and take planning.
13. Cleaning up the dining room means getting the fast food bags out of the back seat of your car.
14. Your reason for not staying in touch with family is that they do not have e-mail addresses.
15. You consider second-day air delivery painfully slow.
16. Your dining room table is now your flat filing cabinet.
17. Chats with your next-door-neighbour are by email rather than over the garden fence.
18. You hear most of your jokes via e-mail instead of in person.
19. You get an extra phone line so you can get phone calls.
20. You disconnect from the Internet and get this awful feeling, as if you just pulled the plug on a loved one.
21. You get up in the morning and go online before getting your coffee.
22. You wake up at 3:00 am to go to the bathroom and check your E-mail on your way back to bed.
23. You're reading this.
24. Even worse; you're going to send it on to someone else.

Optimism v Pessimism

(Are your audit reports optimistic, or pessimistic? It depends on the mindset of the reader – Ed)

An optimist sees the best in the world, while a pessimist sees only the worst. An optimist finds the positive in the negative, and a pessimist can only find the negative in the positive. Let me illustrate what I mean . . .

An avid duck hunter was in the market for a new bird dog. His search ended when he found a dog that could actually walk on water to retrieve a duck. Shocked by his find, he was sure none of his friends would ever believe him. He decided to try to break the news to a friend of his, a pessimist by nature, and invited him to hunt with him and his new dog. As they waited by the shore, a flock of ducks flew by. They fired, and a duck fell. The dog responded and jumped into the water. The dog, however, did not sink but instead walked across the water to retrieve the bird, never getting more than his paws wet. The friend saw everything but did not say a single word. On the drive home the hunter asked his friend, "Did you notice anything unusual about my new dog?" "I sure did," responded his friend. "He can't swim."

TIME MANAGEMENT

"I love deadlines. I love the whooshing sound they make as they fly by."

Douglas Adams, Writer

"One never notices what has to be done; one can only see what remains to be done."

Marie Curie, Chemist

"What is the major problem? It is fundamentally the confusion between effectiveness and efficiency that stands between doing the right things and doing things right. There is surely nothing quite so useless as doing with great efficiency what should not be done at all."

Peter Drucker, Management Theorist

"Who begins too much accomplishes little."

German Proverb

"Time waste differs from material waste in that there can be no salvage."

Henry Ford, Car Maker

"To do two things at once is to do neither."

Pubilius Syrus, Latin Writer

Computer Audit Specialist Group

British Computer Society

Registered Charity No. 292786

Management Committee

CHAIRMAN	**John Bevan**	**Audit & Computer Security Services**	**01992 582439** **john.bevan@virgin.net**
SECRETARY	**Raghu Iyer**	**KPMG**	**020 7311 6023** **raghu.iyer@kpmg.co.uk**
TREASURER	**Mike Demetriou**	**CrestCo Ltd**	**020 7849 0000** **mike.demetriou@crestco.co.uk**
MEMBERSHIP SECRETARY	**Jenny Broadbent**	**Centrica plc**	**01784 645688** **jenny.broadbent@centrica.co.uk**
JOURNAL EDITOR	**John Mitchell**	**LHS Business Control**	**01707 851454** **john@lhscontrol.com**
WEB MASTER	**Siobhan Tracey**	**Booker plc**	**01494 442883** **siobhan.tracey@bbw.booker.com**
SECURITY COMMITTEE LIAISON	**John Bevan**	**Audit & Computer Security Services**	**01992 582439** **john.bevan@virgin.net**
TECHNICAL BOARD LIAISON	**Vacant**		
TECHNICAL BRIEFINGS	**Paul Plane**	**Dai-Ichi Kangyo Bank**	**020 7283 0929 x 1222** **pplane@dkbeurope.com**
MARKETING	**Steve Pooley**	**Independent Consultant**	**01580 891036** **steve.pooley@cast.com**
ACADEMIC RELATIONS	**David Chadwick**	**Greenwich University**	**020 8331 8509** **d.r.chadwick@greenwich.ac.uk**

Membership Enquiries to:

Janet Cardell-Williams
49 Grangewood
Potters Bar
Herts
EN6 1SL

Fax: 01707 646275
Email: members.casg@bcs.org.uk

Registered Charity No. 292786

PLEASE RETURN TO

Janet Cardell-Williams
CASG Administrator
49 Grangewood
Potters Bar
Herts EN6 1SL
Fax: 01707 646275

Membership Application

(Membership runs from July to the following June each year)

I wish to APPLY FOR membership of the Group in the following category and enclose the appropriate subscription.

CORPORATE MEMBERSHIP (Up to 5 members) * £75

* Corporate members may nominate up to 4 additional recipients for direct mailing of the Journal (see over)

INDIVIDUAL MEMBERSHIP (NOT a member of the BCS) £25

INDIVIDUAL MEMBERSHIP (A members of the BCS) £15

BCS membership number: _____

STUDENT MEMBERSHIP (Full-time only and must be supported by a letter from the educational establishment).

Educational Establishment: _____ £10

Please circle the appropriate subscription amount and complete the details below.

INDIVIDUAL NAME: (Title/Initials/Surname)
POSITION:
ORGANISATION:
ADDRESS: POST CODE:
TELEPHONE: (STD Code/Number/Extension)
E-mail:
PROFESSIONAL CATEGORY: (Please circle) 1 = Internal Audit 4 = Academic 2 = External Audit 5 = Full-Time Student 3 = Data Processor 6 = Other (please specify)
SIGNATURE: DATE:

PLEASE MAKE CHEQUES PAYABLE TO "BCS CASG"
AND RETURN WITH THIS FORM TO THE ADDRESS SHOWN ABOVE

ADDITIONAL CORPORATE MEMBERS

INDIVIDUAL NAME:
(Title/Initials/Surname)

POSITION:

ORGANISATION:

ADDRESS:

POST CODE:

TELEPHONE: (STD Code/Number/Extension)

E-mail:

PROFESSIONAL CATEGORY:

1 = Internal Audit	4 = Academic
2 = External Audit	5 = Full-Time Student
3 = Data Processor	6 = Other (please specify)

INDIVIDUAL NAME:
(Title/Initials/Surname)

POSITION:

ORGANISATION:

ADDRESS:

POST CODE:

TELEPHONE: (STD Code/Number/Extension)

E-mail:

PROFESSIONAL CATEGORY:

1 = Internal Audit	4 = Academic
2 = External Audit	5 = Full-Time Student
3 = Data Processor	6 = Other (please specify)

INDIVIDUAL NAME:
(Title/Initials/Surname)

POSITION:

ORGANISATION:

ADDRESS:

POST CODE:

TELEPHONE: (STD Code/Number/Extension)

E-mail:

PROFESSIONAL CATEGORY:

1 = Internal Audit	4 = Academic
2 = External Audit	5 = Full-Time Student
3 = Data Processor	6 = Other (please specify)

INDIVIDUAL NAME:
(Title/Initials/Surname)

POSITION:

ORGANISATION:

ADDRESS:

POST CODE:

TELEPHONE: (STD Code/Number/Extension)

E-mail:

PROFESSIONAL CATEGORY:

1 = Internal Audit	4 = Academic
2 = External Audit	5 = Full-Time Student
3 = Data Processor	6 = Other (please specify)