

A.S.M.A. (NSW) NEWS

APRIL, 1993

This is the first edition of a news-sheet for ASMA(NSW). You may have noticed, that since ASMA(VIC) took charge of its publication, Metrics Matters is not published as frequently as it used to be. The last edition was in December of last year, the next one is due at the start of May. We, the NSW Executive, believe that gap is too long. So we have started a Newsletter. This first one is rather short - its length will increase. It is designed to keep you informed on what is happening in the Metrics front and with ASMA. We will publish in the same way as Metrics Matters used to be, that is, in the months in which we do not have meetings.

APRIL GENERAL MEETING

1. Presentation

Mr Julian Ehrlich will present on "Manufacturing Software Metrics: Measuring up for the 21st Century". He is the Research Manager for the Yankee Group Australia and PacRim. Topics covered include: the five major manufacturing metrics; assessing corporate CIM/IS and the role of function points; competitive benchmarking; data collection; and customer service as the next manufacturing frontier.

2. Motion for a Change in Length of Term for Executive

A motion will be put forward at the April General meeting to vary the length of term of office for the Association's Executive. Proxy votes will be accepted in writing only. Mail votes (addressed to P.O. Box 11, Arncliffe, 2205) must be received on or before 20th April, 1993.

The motion is: "That an Executive member serve a term of two years, with the exception of the Programme Director, who will continue to serve one year. There will be half elections each year at the June General Meeting. The Election in 1993 (and all odd numbered years) will be for Secretary, Treasurer, Programme Director. The Election in 1994 (and all even numbered years) will be for Chairman, Assistant Secretary, Membership Secretary, Programme Director."

The reason for this proposal is to increase continuity within ASMA and make the administration of ASMA more efficient and affective.

NATIONAL CONFERENCE

The First Australian Conference on Software Metrics (ACOSM '93) will be held in Sydney on 18-19 November, 1993. Organised by ASMA(NSW) it will bring together everyone interested and/or knowledgeable in metrics from throughout Australia and the world. Papers are being called for (see enclosed flyer) as are volunteers to help in the organisation. We never have enough helpers (the more there are, the easier it becomes for everyone) - just contact anyone on the Executive.

REGIONAL MEETINGS

There has been some interest shown in having general meetings at venues other than the Sydney CBD, for example Parramatta. Also there is a possibility of having lunchtime meetings. These meetings would be in addition to the current ones. If you are interested in attending any of these, let us at the Executive know - we will only run them if there is sufficient interest. Better still, if you can help organise any or even one we would be very grateful.

Interest has also been shown in having meetings in regional centres, Newcastle especially. This could lead to formation of sub-branches. If anyone in outside of Sydney can take an active role in the formation of regional sub-branches or just organising a meeting or two, again please contact any member of the Executive (or better still, stand for a position at the next Annual General Meeting).

P.T.O.

FEBRUARY MEETING

At our last meeting, Mr Terry Lynch presented an enlightening presentation on software quality metrics. Terry began the presentation by asking the meeting attendees to identify what they thought would be the criteria for quality in a ski parka. This served to demonstrate Terry's first point, that what is regarded as an important quality factor to one person is not necessarily an important quality factor to another. The second point that it highlighted is that there must be a quantifiable and objective way of measuring each quality factor.

Terry went on to discuss techniques for measuring the software development process and the eventual software product. In both cases, the objectives of measurement are to measure the effectiveness and efficiency of quality.

Quality in the Development Process

In the development process, the measure of quality effectiveness is how well the quality initiatives are working. For example, is the defect removal process working? The measure of the efficiency of quality initiatives is how they are reducing the costs of re-work and identifying potential areas of improvement.

Examples of development process metrics are:

Testing Proficiency = $\frac{\text{Number of defects introduced from a previous phase}}{\text{Size X Complexity}}$

Efficiency of the process = $\frac{\text{Number of defects introduced from a previous phase}}{\text{Total defects for a phase X Size}}$

Quality in a Software Product

In a software product, quality effectiveness is how the product meets its intended business need. What is the relevance of the product to the way business is conducted in an organisation? How easy is it to use? How well does it interact with other software products?

Quality efficiency addresses issues such as reliability of software. How flexible is the software? How easy is it to maintain?

Terry used and discussed the USAF Rome Laboratories as an example of quality criteria for software products and suggested that they may be a good starting point for organisations seeking to start product metrics.

Terry concluded the presentation with a reminder that only if we can measure quality, can we manage it. Furthermore, not all products need to be of extremely high standard. Finally, if metrics are in place, then quality can be negotiated prior to development.

Copies of the overheads are available from Syd Finlay (Phone: 378 0228, Fax: 378 8870), Diana Thompson (Phone: 287 4336, Fax: 287 4805) or Terry (Phone: 411 3455, Fax: 412 2639).

Bye till next time,
Hugo Rehesaar

CALL FOR PAPERS

ASMA

ACOSM'93

First Australian Conference on Software Metrics

Sydney, Australia, November 18-19, 1993
Sponsored by: Australian Software Metrics Association

The Australian Software Metrics Association (ASMA) was established to provide a forum for IS professionals and other interested parties to foster and promote software metrics and to improve software project management and estimation through better project measurement. ASMA provides a vehicle for sharing experiences in software measurement, a productivity/quality forum and a focus for data collection and analysis.

Contributions are solicited from both practitioners and researchers for the First Australian Conference on Software Metrics. Software measures assess attributes of interest in the development, maintenance and management of software and other aspects of IT management within organisations. This conference will bring together both researchers and practitioners who are interested in the application of software metrics to help better manage the IT function

TOPICS include but are not limited to:

- internal marketing of metrics programs
- introduction of metrics programs within organisation(s)
- measurement of key performance indicators
- software process improvement
- productivity studies
- metrics and object-oriented systems
- metrics at different stages of the software lifecycle
- results from the practical uses of software metrics and models
- quality metrics and the cost of quality
- function points, complexity metrics, testing metrics
- measurement of the effectiveness of software in relation to business needs
- measurement of the productivity and reliability of production software

INSTRUCTIONS TO AUTHORS

Authors who wish to submit a paper for consideration by the program committee should send a one page abstract of their proposed paper by 31st July to:

ACOSM'93 C/o Dr. J. Verner,
School of Information Systems,
University of NSW,
P.O. Box 1, Kensington,
NSW 2033, Australia,
Fax 61 2 622 4061, phone 61 2 697 4847 email Junev@cumulus.csd.unsw.oz.au. Authors should include their address, telephone number, fax number and e-mail address.

Abstracts will be reviewed by the program committee. Authors of those papers accepted for presentation will be notified by August 31, 1993.

Camera ready copies of the accepted papers limited to 12 pages (approximately 5000 words) should be received no later than October 10th, 1993.

Australian Software Metrics Association

P.O. Box 11, Arncliffe, N.S.W., Australia, 2205. Tel: 02 697 4450 Fax: 02 662 4061

NEXT MEETING

TUESDAY, 20th April, 1993

at 5:00pm for 5:30pm

Commonwealth Bank Training Centre

552 George St, Sydney

(opposite the Town Hall)

Manufacturing Software Metrics

Julian Ehrlich is Research Manager for the Yankee Group. Topics to be covered include five major manufacturing metrics; competitive benchmarking; corporate CIM/IS and the role of function points; customer service.

A motion will also be put to vary the period in office of the Executives. Details are in the Newsletter.

All A.S.M.A. members and guests are welcome.

Refreshments will be served from 5:00pm

PLEASE PUT THIS ON A NOTICE BOARD



MAY & JUNE

For those who wish to improve their ability to produce efficient software systems. And to increase the knowledge and skills of software development professionals so their employer organisations can proceed to full accreditation under supplier assessment schemes for compliance with AS 3901 (ISO 9001) and AS 3563.

CERTIFICATE IN SOFTWARE QUALITY

The ACS in association with the Software Quality Association (NSW) is conducting a 10 day Certificate course in:

Software Quality Assurance & Management

Dates are Tuesday and Wednesday May 18 & 19, 25 & 26, June 8 & 9, 15 & 16, 22 & 23.



Who Should Attend

Software managers, software assessors, QA assessors and professional software practitioners seeking to extend their existing expertise and at the same time gain formal recognition of Software Quality Management skills.

Benefits

The participant will have the tools and expertise to develop a company-specific Software Quality Manual and develop and maintain quality software products and services.

- Learn the skills and techniques to lead your organization down the quality road, through certification to Total Quality management.
- Gain the knowledge to seek personal certification as a Quality professional.
- Understand the latest techniques to measure software quality and productivity.
- Find out about the resources available to help you in finding your way through the maze of quality jargon.
- Understand how to satisfy customers and improve productivity by lessening re-work.

About The Course

The course is designed for quality assurance managers, project managers and team leaders from software houses and in-house software development groups.

It will be conducted over a period of ten attendance days and students can expect to be required to undertake some assignment work in their own time. An examination will be conducted during the last day which will provide a large part of the assessment for the award of the Certificate.

The course will be led by John G. Phippen who has worked in the software quality field for more than twelve years, is the Chair of the Australian Standards Committees for Software Quality and

Software Engineering Standards and regularly represents Australia at International Working Groups in the SE area. In addition, as a consultant he has helped a number of organisations achieve Quality System Certification. He is currently Chairman of Standards Australia Committee QR/3 for AS3563 (Software Quality Management Systems) and also Chair of IT/15 (Software Engineering Standards).

John lectures and presents papers on various aspects of Software Engineering and Quality Systems and he is also qualified as a Quality Systems Assessor and is a licensed TQM Presenter.

Comprehensive notes and copies of Australian Standard 3563 Parts 1 & 2 (1991) will be provided to attendees which will form a valuable resource for the implementation of the principles after the course.

Topics Covered

- Software Quality Concepts
- Principles of Software Quality
- Software Quality Systems and Standards
- Planning and Objectives for Software Quality
- Software Risk Management
- Software Quality Techniques and Tools
- Software Metrics and Estimation
- Configuration Management
- Verification, Validation and Testing
- Software Quality Improvement
- Software Quality Costs

Seminar Fees:

(includes lunch, morning and afternoon teas, course notes, set of standards (AS3563 parts 1 and 2) and SQA/ACS Certificate)

ACS members: \$2400 Non members: \$2700

Enrolment Form - ACS Professional Development Course

ALL REGISTRATIONS MUST BE ACCOMPANIED BY PAYMENT.
MAKE CHEQUES OUT TO THE AUSTRALIAN COMPUTER SOCIETY, NSW.

COURSE NAME: _____ COURSE FEE: _____ COURSE DATE: _____

ATTENDEE: _____

SURNAME GIVEN NAMES

ORGANISATION: _____

WORK ADDRESS: _____

PRESENT POSITION: _____ WORK PHONE: _____ WORK FAX: _____

ENCLOSE A CHEQUE FOR \$ _____ SIGNATURE OF ATTENDEE: _____

HOW DID YOU FIRST LEARN OF THIS COURSE? NEWSLETTER OTHER PROF. SOCIETIES
 OTHER MAGAZINES ACS RADIO WORD OF MOUTH

ACS NSW PROFESSIONAL DEVELOPMENT
FLOOR 6, 149 CASTLEREAGH ST, SYDNEY NSW 2000
PHONE: (02) 283 5544 FAX: (02) 283 5543

CANCELLATIONS

ALL CANCELLATIONS INCUR A \$50 HANDLING FEE. ANY CANCELLATIONS MADE LESS THAN 10 WORKING DAYS PRIOR TO COURSE COMMENCEMENT WILL BE CHARGED IN FULL. REPLACEMENTS ACCEPTED AT ANY TIME.