

Hong Kong Computer Society Elects New Council



HKCS old and new Council Members
(from left to right): Mr John Li; Mr S W Cheung; Mr H P Suen; Mr Paul Kwan; Mr Sunny Lee; Mr Daniel Lai; Dr Louis Ma; Mr Joseph Leung; Ms Evon Ying; Ms Annie Lok; Mr Dennis Pang; Dr Hareton Leung; Prof K H Lee

The Hong Kong Computer Society held the Annual General Meeting on 27 April 2001 (Friday) at the Vocational Training Council. At the General Meeting, Mr. Daniel Lai was elected President for a term of three years and members of the Society elected new Council members for 2001-2003.

Members of the new HKCS Council are as follow:

| Position | Name | Company |
|---------------------------------------|-------------------|--|
| President | Mr Daniel Lai# | MTR Corporation Ltd. |
| Vice President (Internal Affairs) | Mr H P Suen# | The Hong Kong Jockey Club |
| Vice President (External Affairs) | Mr Sunny Lee# | The Hong Kong China Gas Company Ltd. |
| Vice President (Membership) | Mr Dennis Pang | Information Technology Services Department - HKSARG |
| Hon Secretary | Mr Raymond Yu* | Saggio (Asia Pacific) Company Ltd. |
| Hon Treasurer | Mr Martin Chan* | Pacific Century Cyberworks |
| Director of Community Services | Mr Joseph Leung# | dots21 Group Limited |
| Director of Education & Training | Ms Evon Ying | Hong Kong Institute of Vocational Education (Tsing Yi) |
| Director of International Affairs | Mr Clement Tong | Tai Fook On-line Services Ltd. |
| Director of Membership Administration | Dr Hareton Leung* | The Hong Kong Polytechnic University |
| Director of Membership Service | Mr Kent Ting* | IBM China/Hong Kong Ltd. |
| Director of Professional Development | Prof K H Lee | The Chinese University of Hong Kong |
| Director of Public Relations | Mr John Li | Hewlett-Packard Hong Kong Ltd. |
| Director of Publication | Ms Annie Lok | Hong Kong and Shanghai Banking Corporation |
| Director of Special Projects | Mr Paul Kwan# | EPRO System (HK) Ltd. |

* newly elected

re-elected

Site Visit to School of Creative Media, City University of Hong Kong

In the morning of 21 April 2001, about fifteen members attended the HKCS Site Visit to the School of Creative Media, City University of Hong Kong. Prof. Mark Green gave us an informative briefing about the academic programs and also led a tour for us to see the facilities and equipment of the school.

The School was established in July 1998 to meet the growing demand from the media industry, including

interactive multimedia, Internet development and administration, moving image production and distribution, cable and satellite broadcasting, advertising and publishing, etc. It offers Associate of Arts in Media Technology, Bachelor of Arts in Creative Media and Master of Fine Arts (MFA) in Media Design and Technology. It is a multidisciplinary faculty. It combines creative and technical staff, including computer science, engineering, film/video, photography, drama, multimedia and critical studies. Currently, including Prof. Green, there are two computer scientists in the faculty. The school aims to produce creative graduates with



A site visit to the School of Creative Media, City University of Hong Kong on 21 April 2001.

background in technology and to explore the interaction between arts and technology. It was learned from Prof. Green that the school also welcomes IT professionals without fine arts background to join their MFA program.

We have a tour to various laboratories of the school. There are a wide range of facilities, including high-end SGI graphic computers and regular PC; facilities supporting digital video projects include digital video cameras, non-linear editing workstations, and sound editing and mixing consoles, etc. It was learned that, besides high-end and expensive computer systems and software, the school also train their students to use freeware like Blender and python. The availability of the free or less expensive development tools are especially important for SME. It encourages talent and ambitious people to start own business, said Prof. Green.

By Mr Paul Kwan
Director of Special Projects

Hong Kong Computer Society launches International Computer Driving Licence

A launch of an international standard of IT skill competency for the assessment of computer application proficiency - the International Computer Driving Licence (ICDL) in Hong



The launching ceremony was officiated by Mrs Carrie Yau (left), Secretary for Information Technology and Broadcasting on 3 May 2001 (Thursday).



Mr Eason Chan and Ms Miriam Yeung were presented with the ICDL Ambassador Certificate to help promote the application of IT in Hong Kong.



Kong was held on 3 May 2001 (Thursday). There were over 240 guests to attend this official launching ceremony at Grand Hyatt Hong Kong.

ICDL is an internationally recognized standard of competency, certifying that the holder of the licence has the basic knowledge of IT and has the competence to use a personal computer for common applications.

In view of the success of ICDL in Europe, HKCS has adopted the assessment scheme in Hong Kong. ICDL was developed by European Computer Driving Licence Foundation and has so far issued over 1 million licences.

The launching ceremony was officiated by Mrs Carrie Yau, Secretary for Information Technology and Broadcasting. Mr Eason Chan and Ms Miriam Yeung were invited to be the Ambassadors of ICDL to help promote the application of IT in Hong Kong.

According to Mrs Yau, the Government has formed a Task Force on IT Manpower, chaired by herself, to examine measures to enhance IT manpower supply in Hong Kong. One of the subjects of the Task Force is how to facilitate the establishment of an accreditation system for IT courses at sub-degree level and below.

HKCS has appointed the IT Training Quality and Certification Institute to be its execution unit for assessing and certifying IT training, for the development and operations of an IT training portal, and to promote and administer certification programmes. For further details of ICDL, please visit <http://www.ittqc.com>

Seminar on Intellectual Property Ordinance 2000 (Miscellaneous Amendments)



A seminar on Intellectual Property Ordinance 2000 was held on 17 April 2001 at City University of Hong Kong.

Given the significant impact of the newly amended Intellectual Property Ordinance to us all, HKCS arranged a seminar in the City University of Hong Kong on 17 April 2001 to ensure that we understand the legislation and the steps that we should take to comply with it. HKCS invited speakers from Intellectual Property Department, Customs and Excise Department, Business Software Alliance, and Hong Kong Law Society to brief us on their respective areas. Over 90 participants were present in the event. Mr. Joseph Leung, Director of Special Projects of HKCS was the moderator of the Panel.

Mr. Peter Cheung, Deputy Director of Intellectual Property Department explained the necessity for the amendment of the ordinance and how it affects us. He said although the existing Copyright Ordinance already provides that a person commits an offence, if one possesses an infringing copy of a copyright work “for the purpose of trade or business” with a view to committing any act infringing the copyright. However, it is not exactly clear whether this provision applies to the situation where the “trade or business” in question does not consist of selling or dealing in the infringing copy itself. To straighten it out, the ordinance was amended to clarify that people who possess infringing copies of copyright works in the course of, in connection with, or for the purpose of their trade or business, with a view to committing any act infringing the copyright, will commit an offence. The offence is committed even if they do not sell or deal in the infringing copies themselves. Mr. Cheung concluded by saying that we must always obtain licenses or approval from the copyright owners if we need to make copies of copyright works for your business.

Mr. Luke Au Yeung, Deputy Head of Intellectual Property and Investigation Bureau, Customs and Excise Department advised us how they would enforce the ordinance. For instance, they investigate complaints alleging infringement of trade marks and copyright and complaints alleging false

trade descriptions; charging any person who possesses, without lawful authority or reasonable excuse, any video recording equipment in a place of public entertainment that is used primarily as a cinema, theatre or concert hall for the showing of films or performances. The department has extensive powers of search and seizure, but in order to avoid causing unnecessary nuisance to the business community, Customs will not proactively conduct routine checks on various business organizations unless receiving complaints lodged by, say, copyright owners. Customs will not enter or search the premises of a business organization unless there are reasonable grounds for suspecting that it has committed an offence. Under such circumstances, Customs will normally apply to a magistrate for an entry and search warrant for searching the premises concerned.

Ms Mei Mei Ng of Business Software Alliance told us how to comply with the new law through software asset management. She said the best way for businesses to ensure compliance with the law is to check that their software usage is consistent with the license terms. Businesses should develop a clear software asset management policy and ensure that all their employees fully understand the policy and practice. Businesses should conduct an audit of the software in use on computer system and compare the results to the valid licenses that have purchased. If there are insufficient valid licenses covering the software use, the necessary software licenses should then be purchased, and all unauthorized copies should be immediately deleted. Free software audit tools assist businesses to conduct an audit of the software in use on their computer systems can be downloaded from: http://www.bsa.org/hongkong/freetools/jump_gasp.phtml

Mr. Andrew Law, Solicitor and Chairman of Management & Technology Committee for Professional Practice, Hong Kong Law Society advised us on the rights and obligations as well as the particulars that we must observe under the new law. Mr. Law highlighted that after the amendment of the ordinance, the using or copying of unlicensed software had been turned from a civil wrong to that of a criminal offence. Prosecution under this ordinance is to show prima facie case, it is the burden of the defendant to prove to the contrary. Ostensibly, the new law does not govern home users for using unlicensed software, but it would be another story, if the home users’ computers were installed with business data files. Also, we have to pay particular attention, when we are to copying or forwarding the originator’s correspondence to a third party (outsider), rather than circulating it within our own organization where consent for doing so has already been implied for. To avoid the danger of infringing the originator’s copyright, we must always get one’s consent before forwarding one’s correspondence to a third party.

Lastly, the questions and answers session had aroused enthusiastic participation from the audiences, which had caused the seminar to overrun for more than an hour. The Panel members addressed the questions with their expertise and perceptions, and the audiences were satisfied with their answers.

DBSIG Speaker's Meeting - "The Tale of Two Cities : UML vs XML"



Dr. Cheung Shi-Chi, a prominent trainer and consultant on object-oriented and component-based technologies, delivered a speech in DBSIG Speaker's meeting titled "The Tale of Two Cities : UML vs XML" on 19 April 2001.

On 19 April 2001, Dr. Cheung Shi-Chi, a prominent trainer and consultant on object-oriented and component-based technologies, delivered a speech in DBSIG Speaker's meeting titled "The Tale of Two Cities : UML vs XML".

Dr. Cheung opened his speech to 40 more attendees on the needs to tackle the increasing software complexity by means of object-oriented and component-based technologies. The Unified Modeling Language was briefly introduced with the

aid of an OO CASE tool presentation. Various diagrams were shown in the methodology such as requirement model, analysis model, validation model, sequence diagram, deployment model and so forth.

Dr. Cheung then moved on to the topic of Extensive Markup Language. He highlighted the difference between HTML and XML, weakness of HTML and advantage of XML. He explained some XML terminology, the application of XML and the use of XSL to present the XML tagged data to the user browser. He continued with the trend of OO CASE tool vendor to incorporate XML with UML as XMI (the XML Metadata Interchange) which enables transportability of the UML models from one CASE tool to another.

For those who missed this meeting and are interested on the topic can take a look on the presentation via this link <http://www.hkcs.org.hk/dbsig.htm>

By Mr Benedict Lam
DBSIG Chairman

Announcement

Membership Benefit

Special Offer from Hong Kong Economic Journal (XX)

We have pleasure to announce that HK Economic Journal, which is published from Monday to Saturday every week, is now being offered at a discount of 14% to all HKCS members. Details as below:

- To subscribe the newspaper for a period of six months including delivery service at HK\$858 (original price at HK\$996)
- To subscribe the newspaper for a period of one year including delivery service at HK\$1,716 (original price at HK\$1,992)

Should you like to make your subscription, please call HK Economic Journal at 2856 7541.

This offer is being made to members by the Society as members' benefits. The Society makes no representation or endorsement as to the quality, usefulness, effectiveness or whatsoever of the service or product provided therein. Members are recommended to contact the merchant as to any enquiry in relation to that product or service concerned.



In this issue:

Editor: Roy Ko

- XP - A NEW LIGHTWEIGHT METHODOLOGY Page 5
- NEW HKSPIN EXECUTIVE COMMITTEE Page 6
- REVISED ISO 9001 PROMOTES COMMUNICATION 'THE VITAL CATALYST IN AN ORGANIZATION' (PART 1) Page 6
- ASIA PACIFIC SOFTWARE ENGINEERING PROCESS GROUP (AP-SEPG) CONFERENCE 2001 Page 7
- HKSPIN SPEAKER'S MEETING ON "SOFTWARE RELIABILITY ENGINEERING" Page 8
- CALENDAR OF EVENTS Page 8

XP - A New Lightweight Methodology

Dr. Hareton Leung,
Department of Computing,
Hong Kong Polytechnic University

Many companies have started their ISO 9000 journey and found standards/models like ISO 9000 and Capability Maturity Model (CMM) tend to promote a heavyweight process, as they usually demand large amount of documentation. It is delightful to find a *lightweight* software development method called *Extreme Programming*, which has attracted a lot of attention lately.

Extreme Programming or XP was developed by Kent Beck. It is based on four *values*: *communication*, *feedback*, *simplicity*, and *courage*. From these, a dozen tried and tested practices are woven together so that each one compliments and strengthens each other. This methodology combines the many practices into an integrated process.

At first sight, some of the recommended practices are controversial and seem to oppose those advocated by ISO 9000 and CMM. For example, XP emphasizes evolutionary design, where the design evolves as it is built, rather than planned out in detail at the beginning. This contradicts the conventional wisdom that the design be completed prior to coding.

Other well-known practices included in XP consist of:

1. Pair programming
Two programmers sit together at a terminal, using one keyboard and one mouse. Pair programming improves the quality of design and implementation without sacrificing productivity.
2. Writing test cases before coding
Test cases and code are developed at the same time, with test case development often occurring before the actual code is written. Programmers continually write unit tests,

which must run flawlessly for development to continue. Testing the software starting on day one provides frequent feedback to the developers on their code.

3. Collective code ownership
Everybody in the team can improve the code, that is, to change the code. This collective ownership encourages everyone to contribute new ideas to all parts of the project. When several team members know each part of the code, the impact of one person leaving the project is lessened.
4. Continuous integration
All code is integrated and tested every few hours. This reduces development conflicts and creates a natural end to a development cycle.
5. Continual testing and revision
Testing occurs after each change to the code and there are frequent improvements to the code. Code improvement aims to simplify the software, which can reduce the maintenance effort.

All these do not seem too strange when we realize that changes will occur throughout the development project. The client will change the requirement no matter what methodology we use. The XP methodology has provided an incremental development process that works well with changing requirements. In fact, like other *light methods*, such as Crystal, Adaptive Software Development, and Feature Driven Development, XP welcomes changes.

Although XP is simple in its details, it may be difficult to apply in many organizations. To find out more about XP, check out the references listed below.

References

- <http://www.xprogramming.com/>
- <http://www.extremeprogramming.org/>
- Kent Beck, *Extreme Programming Explained: Embrace Change*, Addison-Wesley, 2000

New HKSPIN Executive Committee

A new executive committee was formed after HKSPIN AGM this year.

| | |
|--------------------|---------------------|
| Chairman | : Mr. Roy Ko |
| Vice Chairman | : Mr. John Goh |
| Secretary | : Mr. William Kwan |
| Treasurer | : Mr. George Leung |
| Editor | : Mr. Steve Trigger |
| Programme Officer | : Dr. Hareton Leung |
| Membership Officer | : Mr. Benedict Lam |
| Committee Member | : Mr. Paul Kwan |
| | Ms. Rose Chu |
| | Ms. Y.L. Tam |

Revised ISO 9001 promotes communication - 'the vital catalyst in an organization' (Part 1)

By Dr. Erika Leonardi

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MANAGEMENT SUMMARY Communication-both internal, and external with the customer - is a requirement of the revised ISO 9001:2000. This management briefing reviews the internal communication component as the "essential element" in creating the vital dialogue between the various levels and functions of an organization. The introduction of these new requirements is clear recognition of the vital role of communication in management of an organization.

Communication and the whole dimension of company management is now much more prominent in the new version of ISO 9001. It lays down the requirement to circulate adequate flows of information throughout the organization, with employees seeing their roles anew as customers, and suppliers responsible for output and input as essential parts of the communication process.

Organizations should restructure all those channels of communication that allow its different units to "speak" to each other, such as telephones, notice boards, newsletters, intranet and meetings, and define the personnel involved as an integral part of the process. Good communication is the "vital catalyst" that will enhance the quality management system and, above all, the well-being of everybody in the organization. It also paves the way to better external communication with the customer.

Introduction of Communication Requirements:

For the first time, the importance of communication is now made explicit in the ISO 9000 standards, as is evident from ISO/FDIS 9001:2000 - a development very much welcomed. Communication requirements appear in two sections: 5. Management Responsibility, and 7. Product Realization.

The introduction of these new requirements is clear recognition of the vital role of communication in the management of an organization. Indeed, the whole dimension of company management and its role and commitment is much more prominent in the new ISO 9000 versions, and the points of contact with total quality management are now quite extensive. It is not by chance that the requirement for internal communication is introduced in the section devoted to management responsibility.

(ISO 9000 Clause 5.5.3) Internal Communication

Top management shall ensure that appropriate communication channels are established within the organization and that communication takes place regarding the effectiveness of the quality management system.

Underlying the importance of communication is the logic behind the process. Although this aspect is not new to ISO 9000, the introduction of the concept of a communication process, in the full sense of the term, in an organization is a significant evolution. In fact, to introduce the concept of

a process will imply for many organizations a transition from a functional organizational model to a process model. This is not always easy because it demands a different approach to performing one's role.

The logic of the process "imposes" the need to circulate information so that the different work units are harmonized. And here, 5.5.3 internal communication, a sub-clause of 5.5. Responsibility, authority and communication clearly require that the different organizational levels and job functions are supplied with an adequate flow of communication, not only concerning the processes linked to the quality management system (QMS), but also relative to their efficiency.

Its message is clear - communication between such areas must guarantee not only that each process (commercial, design, purchasing, etc.) produces the defined output, but also that it takes place from the point of view of effectiveness. Effective communication can forestall potential negative events - e.g. unnecessary repetition of an activity, constant "fire-fighting", an incomplete reply to the customer, etc.

Employees as 'Customers' and 'Suppliers'

The advantage of looking at the process anew is that every function performs its role from a different viewpoint - not in isolation, but instead as "customer" and "supplier," in addition to job functions. Seeing organizational roles from this perspective promotes a different way of existing and acting. The underlying guiding thought will be: "The output of my process has value only to the extent that a colleague-customer exists who can use it for his or her activity; and at the same time, I appreciate my colleague-supplier for generating my input." If we accept this logic, the importance of the communication component becomes immediately apparent, and it is through communication that the different contributions become clear.

However, in any organization, communication is not linked solely to the process of management. In order for people to perform their roles in a correct and understanding manner

(6.2.2. Competence, awareness and training) attention must be given to other aspects that have not been relevant to the quality management system until now. To ensure effective communications at all levels, the first step is to define the channels and personnel involved.

The Organization as an Organism

To apply the revised ISO 9001 effectively, look at the organization as if it were an organism, highlighting the fact that it is a combination of different parts that can only give the best of themselves if they are able to establish contact and interact by "creating a dialogue." In a living organism, the different parts (nervous system, skeleton, muscles, etc.) must maintain contact to perform their roles correctly. None can sustain life separately. The analogy with an organization is obvious: the different units can only perform optimally if they communicate continually with each other.

Communication is the essential element. If design does not exchange information with production, purchasing and technical assistance, how can its output be effective? And if the administration does not exchange information with the commercial department and purchasing, how too, can it be effective?

(To be continued)

Asia-Pacific Software Engineering Process Group (AP-SEPG) Conference 2001

November 12-13, 2001 Hong Kong

November 15-16, 2001 Beijing

A conference jointly organized by the HKSPIN and HKPC to promote software process improvement practices, and to share experience and new ideas aiming at building software of better quality.

For paper submission and enquiries, please contact Mr. Roy Ko at 2788 5882 or email at roy@hkpc.org

HKSPIN Speaker's Meeting on "Software Reliability Engineering"

More than 20 members and guests attended the HKSPIN Speaker's meeting held on 24 April 2001. The speech was delivered by Professor Michael Lyu of Chinese University of Hong Kong, on a basic understanding of how to apply software reliability engineering techniques during software development. Prof. Lyu first gave a brief definition on errors, defects, faults and failure in the context of software reliability. He then discussed that software reliability related activities can be carried out during various stages of software development and described the techniques and tools that can be applied during these stages, including the design stage, the testing stage and the evaluation stage. The talk was very well received and participants raised many questions at the end of the presentation.



Mr. Roy Ko, Chairman of HKSPIN presented a souvenir to (Right) Prof. Michael Lyu, the speaker of "Software Reliability Engineering" on 24 April 2001 (Tuesday).

Calendar of Events

| Date | Name of Event | Location | Contact |
|-----------------|---|--------------------------------|---|
| May 29 - June 1 | International Internet & Software Quality Week 2001 | San Francisco, California USA | http://www.soft.com/QualWeek/QW2001/ |
| June 11-14 | European SEPG Conference 2001 | Amsterdam, Holland | http://www.espi.org |
| July 9-11 | First Asia-Pacific Conference on Software Testing Analysis and Review | Hilton Hotel Sydney, Australia | http://www.testingconferences.com |
| September 4-6 | Workshop on Software Process and Product Improvement | Warsaw, Poland | http://www.sea.uni-linz.ac.at/EM2001 |
| October 8-12 | The Ninth International Conference on Practical Software Quality Techniques & The Third International Conference on Practical Software Testing Techniques PSQT/PSTT 2001North | St. Paul, Minnesota, USA | Tel. (651)552-0716, Fax. (651)552-0791 |
| October 8-12 | COMPSAC 2001 | Chicago, Illinois, USA | http://www.csis.hku.hk/~compsac |
| October 10-12 | EuroSPI ' 2001 Conference | Ireland | http://www.eurospi.net |
| October 15-19 | 21st Annual International Software Testing Conference | Orlando, Florida, USA | http://www.qaiusa.com/ |
| October 25-26 | SPICE 2001 Conference | Pisa, Italy | |
| November 12-13 | Asia Pacific SEPG Conference | Hong Kong | Tel. (852) 2788 5865 |
| November 12-16 | Software Quality Week Europe 2001 | Brussels, Belgium | http://www.qualityweek.com/QWE2001/ |
| November 27-30 | International Symposium on software Reliability Engineering | Hong Kong | http://www.issre2001.org/ |
| December 10-11 | Second Asia-Pacific Conference on Quality Software | Hong Kong | http://www.cs.cityu.edu.hk/~apaqs |



Hong Kong Software Process Improvement Network
A special interest group of HKCS

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Hong Kong Computer Society

Room 1915, China Merchants Tower, Shun Tak Centre, 168 Connaught Road Central, Hong Kong

Tel: (852) 2834 2228 • Fax: (852) 2834 3003 • Email: hkcs@hkcs.org.hk • URL: <http://www.hkcs.org.hk/>

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