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A quarterly publication of the Institute of Systems Science, The National University of Singapore

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### First ever Enterprise Social Business Centre of Excellence in Singapore

On 19 April 2012, ISS signed a Memorandum of Understanding with IBM Singapore to set up the first ever Enterprise Social Business Centre of Excellence in Singapore with the support of the Infocomm Development Authority of Singapore (IDA) and the Singapore Workforce Development Agency (WDA).

The Centre aims to transform companies into social businesses by leveraging on social media platforms and tools to improve productivity, connect for innovation and create communities for competitive advantage.

"Today we achieved yet another significant milestone in the longstanding partnership between NUS-ISS and IBM." said Ms. Janet Ang, Managing Director of IBM Singapore.

"Enterprise Social Business goes beyond what users know of Facebook, Twitter or LinkedIn. It acknowledges the intrinsic value in the way employees, customers, citizens and partners engage and that business value is the result of those interactions. That is the competitive advantage that Enterprise Social Business offers."



(First row, left) Ms Janet Ang, Managing Director of IBM Singapore, and (first row, right) Mr Lim Swee Cheang, Director of ISS, signing a Memorandum of Understanding. (Second row, from left) Ms Sandy Carter, Vice President, Social Business and Collaboration Solutions Sales and Evangelism of IBM, Mr Ronnie Tay, Chief Executive Officer of IDA, Mr Wong Hong Kuan, Chief Executive of WDA and Dr Christopher Chia, Chairman of ISS.

It is our goal that this collaboration serves as a platform for C-Suite leaders, government leaders, and community leaders to explore and to create a bold unique Enterprise Social Business Agenda."

Said Dr Christopher Chia, Chairman of the Management Board, Institute of Systems Science, "This partnership allows us to tap on IBM's technology and global expertise to deliver Enterprise Social Business know-how to

Continued on page 2

Far left: (From left) Tin Lai

businesses and organisations in Singapore. NUS-ISS will work closely with IDA and WDA to align the Enterprise Social Business training curriculum to the National Infocomm Competency Framework (NICF) and develop holistic continuing education and training pathways through various modular and qualifications programmes to widen and deepen the capabilities of industry professionals."

The Enterprise Social Business Centre of Excellence will focus on three pillars: training, pilot and practice and research and development. A series of executive seminars, conducted by this Centre, will commence in the second half of 2012. These seminars will help senior executives develop a business culture that fosters open collaboration and sharing among partners, clients, citizens and employees.

There will also be a 2-day Enterprise Social Business Boot Camp for executives and managers, co-conducted by both ISS and IBM. IBM will also provide free software and courseware.

### So what is an **Enterprise Social Business?**

Enterprise Social Business is the practice of doing social business in a mature. repeatable and predictable manner, to achieve measurable outcomes strategic to an organisation. It embeds "social" in all of its processes, connecting people to people, people to information, and data to insight.

It is a company that engages its employees and clients in a two-way dialogue with social tools, is transparent in sharing its expertise beyond its four walls, and is nimble in its use of insight for rapid change and action.

By applying social technologies to business processes, we can radically improve the way organisations operate, for example, by linking skills to the right opportunities where and when they are needed. It empowers companies with the ability to leverage on a wider diversity of skills and expertise to increase productivity and foster innovation and creativity.

### **Declaring** War On An **Outmoded** Cargo Management **System**

Declaring war on a manual, dated cargo management system allowed a team of six Master of Technology (Software Engineering) students at the Institute of Systems Science to rout the competition, bagging the team the best project prize for software engineering in 2012.

In 2011, Aye Thet Mon, Ng Siew Leng, Pragati, Tin Lai Wai, Varun Tak and Zhang Shudong were assigned the task of designing a new automated cargo management system for fast-growing local freight forwarder company WWW Cargo Pte Ltd as their software engineering project.

Then, the company relied on a shared set of MS Excel files stored on shared network drives for its business operations. This was not productive as it meant that staff could not concurrently access the files. Remote and mobile access was also not possible. In addition, searching function was limited by what is offered by Excel. Accessing files was also time-consuming with the staff having to manually navigate file folders and Excel worksheets to find data. Further, staff had to manually email customers in order to update them on every change to cargo records.

After thoroughly understanding the requirements of the company, the team decided to develop an Enterprise Cargo Management System made up of three layers: a UI layer (which uses the ExtJS library), Service layer (which uses the Spring Framework's MVC, AOP, IOC) and Database layer. The team also decided to transform navigation of the system into one page view with rich UI components and widgets that would load whenever a user clicks on any of the available links on the navigation panel.

Given that they had to deliver this complex system within one year, the team decided the only way they could achieve their target was to simulate a war room environment.

Revealed the team, "Our stand for this project has always been that this was not just an academic project but a critical business solution that would help our client to meet business challenges and improve their competitive advantage in a fast-changing environment. Hence, quality cannot be compromised.

In the meeting room, we put up colourful visual charts that closely plotted the progress of the project to motivate and keep us on our toes. The charts definitely encouraged more communication on the go. And any difficulty meeting any particular deadline was highlighted and resolved earlier rather later."

In the end, the team delivered a solution that will make things go a lot easier at work for the staff of WWW Cargo.

The software allows the sales team to easily manage information for their customers and suppliers and assist the customer service staffs to track cargo orders and deliveries for their customers. It also allows the operation staffs to prepare the required documents for imports with ease. And users could access the system anywhere with a standard browser.

The system also has an auto-alert feature that automatically sends an email to a customer whenever there is a change in the status of his cargo order. This means that the customer service staffs no longer need to remember to update customers when this happens.

Another positive feature is the use of ExtJS4as web front end, which provides non-blocking, rich client user experiences similar to a traditional desktop application over the internet.

Programme Director of ISS Dave Hufton was impressed by the team's thorough understanding of the client's processes and the team's ability to develop a detailed, sophisticated user interface that delivers exactly what the client needs.

He commented, "The software was quite clearly designed to meet a specific business need and was also built with a view to future enhancement. What is especially commendable is that despite their relative inexperience and unfamiliarity with the development methods employed, the six managed to develop a fully working innovative system within a year."



### **Bringing** Down **Bad Calls Brought This** Team The **Big Prize**

What do you do if you are a die maker and your test equipment is giving false readings that end up costing you enormous time and money? For four ISS Master of Technology (Knowledge Engineering) students, the answer was to create a Knowledge Based wafer diagnostic programme that would sieve out the good calls from the had

Electronic devices today are assembled from semiconductor components that are themselves made from wafers. The fabrication of wafer is a complex and expensive process. To screen out bad wafers, eTests, wafersort testing, and functional testing are done. However, tests are not always infallible. Occasionally, a die diagnosed as a reject is actually a good die. The reason for the erroneous reading? Bad test equipment setup. Such dies will pass on retest after the fault with the test equipment has been rectified. On the other hand, dies that failed due to process defects – or valid failures – should not be retested.

Throughout the testing process, engineers continually have to make a call as to whether failures are valid based on their knowledge and experience, while drawing on data summary, reports and analysis tools. However, in making such calls, engineers can make mistakes, which can prove costly. In addition, given the huge volume of visual and electrical data that needs to be scrutinised, performing such checks take a substantial amount of time.



Wai, Aye Thet Mon, Zhang Pragati and Ng Siew Leng won best project prize for Left: (From left) Chew Poh Kwee, Hui Kong Meng, Tran The Anh and Tai JiaJun, won hest project prize for knowledae enaineerina.

If failures can be assessed to be valid or invalid more swiftly and with greater certainty, much cost and time can be saved.

With this in mind, Master of Technology students Hui Kong Meng, Chew Poh Kwee, Tran The Anh and Tai Jia Jun decided to create a prototype system that would be able to perform first level assessments that would be able to sieve out 'true' failures from the 'false' failures.

The solution they arrived at combines a hybrid Neural Network component and Rule-Based

The hybrid Neural Network component matches each die against inputs such as stack map, parametric data and XY Euclidean distance to rate the probability that the die is defective. Predictions from three different modules – Back Propagation Neural Network (BP), Support Vector Machine (SVM) and Decision Tree (WEKA J48) - are combined at an ensemble stage to produce a final outcome.

The Rule-Based system seeks to emulate human engineer in his decision-making process, in which he draws on both his knowledge and gut feel to decide whether to send a die for retest.

The final product provides a first level assessment by performing systematic data analysis of test results and analysis, cutting short the time and effort required of an engineer at

Said Kong Meng, "What we have done is transform a technically demanding data analysis application into a format close to a logical, rulebased fuzzy form, creating a framework that is intuitive to understand."

"We incorporated the ability to use generic assessment rules, or specialised customised rule-set, depending our how much the user has acquired in terms of device knowledge and process yield characteristic, to deduce and reason. Other useful features of the programme are the ability to pre-generate parametric wafermaps and to map soft bins to parametric results. Honestly, we have yet to fully exploit the potential of what we have created."

The final product not only won the team the best project prize for knowledge engineering, it was well received when presented at South West Test Conference in San Diego in June. The audience of 300 appreciated the innovative, workable approach to a common industrial

It also impressed at least one corporation, GLOBALFOUNDRIES (Singapore) Pte Ltd, a sponsor of the project.

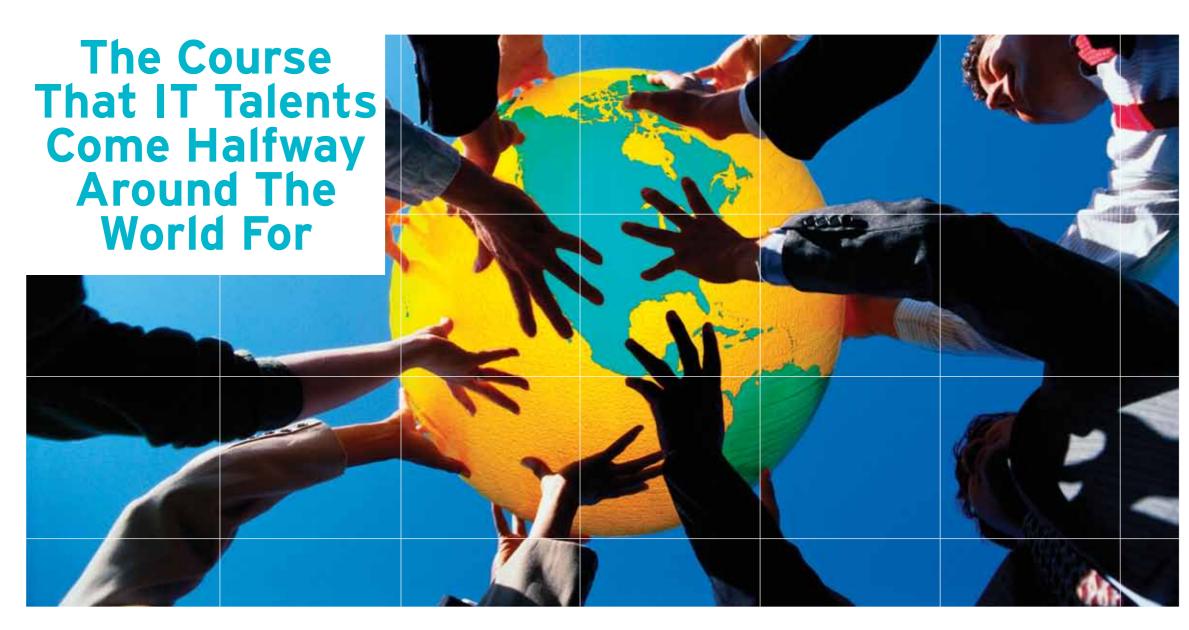
Said Lo Wee Tick, OSAT Supply Chain Management (Turnkey Operations), "A seed has been planted with this project. Perhaps someday, with more advanced algorithms and more intensive training with better hardware, this software could take over the job from human beings to make first level disposition."

Finally, the team also made both their lecturers

Said Fan Zhenzhen, "The team members successfully applied what they learnt in the programme to build a hybrid decision support system that's truly useful to industrial users.

Zhu Fangming concurred, "They've done especially well in terms of understanding and modelling the problem domain knowledge. This had enabled them to analyse and process the raw data into a suitable format with critical derived features to support hybrid NN prediction as well as the test engineer's own 

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### They travel hundreds of thousands of miles to attend this short course.

Since it was first launched a few years ago, the Certified Enterprise Architecture Practitioner course conducted by the Institute of Systems Science has been a magnet for foreign IT talents from across the globe. Students who graduated from the course have come from Australia, China, Hong Kong, the Middle East and Southeast Asia.

In the most recent run of the course, six of the 29 students enrolled were foreign. Among them is Trevor James Lutge, a principal solutions architect from Turkey, who initially didn't take to the idea of studying in Singapore.

He first stumbled across the course two years ago on The Open Group Architecture Framework (TOGAF®) website. Developed by The Open Group, TOGAF is the de facto standard for enterprise architecture. The Certified Enterprise Architecture Practitioner course offered by ISS is TOGAF accredited training course.

He recalled, "My reaction then was: "Oh God, surely I don't have to go to Singapore for this? Can't I do this in the UK or in Dubai?" After further research, he eventually signed up for the course and packed his bag.

His reason: The practitioner-oriented bent of the ISS course. "I researched all the available courses and found that they all focused on how to pass TOGAF. The ISS course is different in that the course is broader in focus – it covers everything you need to know as a practitioner – and it takes a practical approach. For someone who intends to use TOGAF, this is important."

### "It Has Been A Brilliant Experience."

For Indonesian Tony Margo, the experience has been intense but rewarding.

Said the Information Systems and Business Processes Manager with PT. Pertamina Hulu Energi West Madura Offshore, "It has been super intensive in a good way. It is not easy in terms of the assignment and the amount you have to absorb in such a short time. To be honest, I have not been able to sleep the whole week. I kept waking up thinking about the assignments and what the class lecturers said."

"Still," he added, "I can't wait each day for the next instructor to walk into the classroom because one after the other, each has been phenomenal. They are all so good."

Tony signed up for the course because he sees a need to develop a blueprint for his company five years down the road. He also wants IT to do more for the company.

Enterprise architects link the business mission, strategy, and processes of an organisation to its IT strategy and show how the current and future needs of an organisation will be met in an efficient and agile way.

He declared, "It is a very well thought-out course that is well prepared and taught by world-class lecturers."

Trevor James agrees with Tony. "The caliber of the lecturers is just top class, far exceeding my expectations. It isn't just that they have the



Six international students attending the recent Certified Enterprise Architecture Practitioner course at ISS. (From left - Boor Hendra, Trevor James Lutge, Tony Margo, Sagrim Ortis Fernando, Halid Mohadi and Murshid Hafedh Abdullah Al Hingi)

industry experience and the knowledge but more importantly, they have the ability to impart this knowledge to a varied audience. They prepared us to be able to do TOGAF, not just understand it theoretically."

The course is taught by experienced lecturers who are practitioners in the field. They include Course Manager Tan Eng Tsze, a practising enterprise architect consultant who has consulted for the defence and healthcare sectors and was involved in developing the Singapore Government's Enterprise Architecture Methodology and Toolkit. Having worked in IBM, BearingPoint and NCS, he has accumulated experience in Enterprise Architecture, IT architecting, solution architecting and systems integration.

Said EngTsze, "We have six lecturers delivering the course, which enriches the experience sharing with the students. Our lecturers have many years of IT experience and are also practicing enterprise architects. In addition, the course has a practicum component where students are required to work in teams to develop an enterprise architecture blueprint."

#### "Why Did I Take So Long To Get Here?"

For Halid Mohadi, the head of the IT infrastructure department of Brunei Shell Petroleum Company Sdn Bhd, the learning experience, too, has been "brilliant".

"The course has opened horizons to me and will have a huge impact on the next stage of my career," he confessed. "Before I had a limited view of how I can contribute at the design level. This course helped me attain an enterprise mindset and allowed me to see my organisation from a bird's eye point of view." Halid signed up for the course because he is soon to take on the role of enterprise architect in his organisation.

Trevor James Lutge echoed that sentiment. "I am excited by the possibilities that this course opened up to me. Before the course, I was thinking of going down the path of becoming an enterprise architect but now I see that there are possibilities in the intermediary opportunities that I can take advantage of, such as in strategic consulting, in business transformation projects and in IT optimisation projects.

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### What Makes A Great Enterprise Architect? The Answer May Surprise You.





Tony Chong presenting on the topic "The Soft Side of Enterprise Architects".

If you think what makes a good enterprise architect is comprehensive knowledge of hardware, software, application and systems engineering, strong project management and organisational skills, and sound understanding of IT governance and operations, you've only got a fragment of the answer.

According to Tony Chong, a Global Information Technology Manager, a great enterprise architect also leads with influence, is passionate, persistent, innovative, strategic, inquisitive, articulate, persuasive and politically astute. He is an effective negotiator and able to engage in meaningful discussion at different levels of the organisation. He must also possess good business acumen and be skilled in management discipline.

Tony was speaking on the topic **The Soft Side of Enterprise Architects** at the Institute of Systems Science on 24 April. The talk accompanied the launch of The Architecture Community of Practice (ACOP).

ceos today, Tony pointed out to the audience of 50, are extremely interested in getting great enterprise architects. That is because enterprise architecture is recognised to be an integral part of business strategy planning and used to engineer a business to where it wants to be tomorrow.

Enterprise architects work with stakeholders to build a holistic view of an organisation. They link the business mission, strategy, and processes of an organisation to its IT strategy, and show how the current and future needs of an organisation will be met in an efficient and agile way. In short, *enterprise architects are like city planners*.

Because their role spans all divisions of the organisation and they frame an organisation-wide design, they have to serve as leaders, coaches, change agents, business process experts and industry experts.

But how is one to cultivate such a versatile all-rounder?

There lies the rub

Commented Tony, "Generally technical knowledge and skills can be acquired with good training. However 'soft' qualifications such as interpersonal, communication, management and leadership skills tend to be innate traits."

To groom a great enterprise architect, a generic personal and interpersonal training programme will not suffice. Said Tony, "You need a systematic, holistic and deliberate development programme that embraces everything from core qualifications such as technical know-how and soft competencies to monitoring and bridging the gaps in the individual's qualifications. You also need a committee to manage the development of current and potential enterprise architects."

### Where Enterprise Architects Can Shoot The Breeze

Enterprise architects in Singapore now have their own official community in The Architecture Community of Practice (ACOP).

ACoP is made up of a group of architecture practitioners who are passionate about the architecture and committed to the goal of advancing architecture as a foundational discipline in the industry by collaborative learning through sharing knowledge, experience and insights within the community.

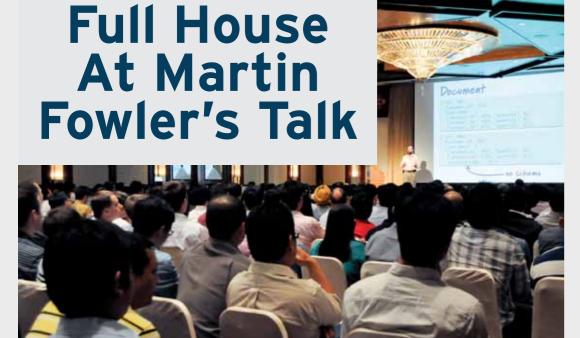
Said Chief of the group, Saket Saith, "As architects, we realised that there was ample opportunity for collaborative learning based on real-life experiences, but no forums or avenues where this could start to happen. Secondly, we realised that there was a general lack of understanding and acceptance of architecture as a discipline within the industry. By bringing together like-minded individuals with varied knowledge and experience, we believed we could elevate the status of architecture as a foundational discipline, growing it beyond the confines of the IT department."

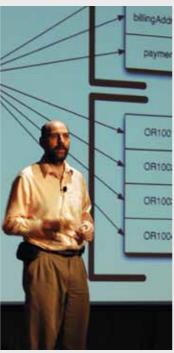
The group aims to build a vibrant network of architecture practitioners who regularly share their knowledge, experience and insights to bounce ideas and learn from each other through both regular face-to-face sessions and an online community portal.



Saket is Chief Architect with Princeton Blue Asia Pacific Pte Ltd.

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It was full house at the first seminar jointly organised by the Institute of Systems Science and global IT consultancy ThoughtWorks. Attendance was so enthusiastic that more than a few people were left standing throughout the two-hour event.

Right: Martin Fowler sharing his thoughts on software design. Left: An audience of 374 people attending a seminar, jointly organised by ISS and

374 people turned up for the talk titled Software Design in the 21st Century on June 7, spilling over the available seats at the ballroom at Raffles City Convention Centre. Among the audience were enterprise architects, software developers, testers, project managers, Chief Information Officers, Chief Technology Officers and technologists. In her opening remark, Karin Verloop, the General Manager of ThoughtWorks Singapore, confessed that "the response has been over and above what we expected".

The turnout reflects the eagerness of the IT community to hear from the event's headline speaker, Martin Fowler, one of the founding fathers of Agile methodology.

Martin is a co-creator of the Manifesto for Agile Software Development – along with more than 15 co-authors – that defined the approach now known as Agile software development. Agile software development is a conceptual framework that promotes interactions throughout the development cycle. In Agile development, requirements and solutions software, but the business function. evolve through collaboration between cross-functional teams.

Martin is an object-oriented programming expert, consultant and award-winning author of five books on software development, several of which were bestsellers. He is the pioneer of object-oriented technology, refactoring, patterns, agile methodologies, domain modeling, the Unified Modeling Language (UML), and Extreme Programming. He is also the Chief Scientist at ThoughtWorks.

In his one-hour presentation, Martin shared his thoughts on software design.

### Software Is Like Sewage Pipes?

Martin started his talk on the distinction between utility and strategic software by relating a story. Recently, he said, a prospective client told one of his salespeople that "software is like sewage pipes, I want it to work reliably and I don't want to know about the details".

So is software a utility, like sewage pipes, or a strategic asset?

Martin's answer is that it can be either, depending on the system. A classic example of a utility IT project, he explained, is payroll. "Everyone needs it, but it's something that most people want to 'just work."

However, in other instances, IT is a clear strategic enabler to a business, allowing it to enter new markets or significantly increase its market share.

The distinction between utility and strategic projects isn't about the

Explained Martin, "To my mind it's all about whether the underlying business function is a differentiator or not. If how you do this function is a crucial part of what makes you better than the competition, then the software that supports this function needs to be as good as you

He added, "The most important point about this dichotomy is to realize that there are two kinds of software projects and they need to be treated entirely differently. The way you staff, run, and budget a strategic project is entirely different to how you do a utility project."

Only a few projects are strategic. With strategic projects, stated Martin, the biggest risk is not doing something before your competitors do. So you need to be able to react quickly. Cost is much less of an issue because the opportunity cost of not doing something is far greater than the cost of software development itself.

Classifying a project as strategic or utility can help organisations decide between building custom software and installing a package. Since the definition of utility is that there's no differentiator, the obvious thing is to go with the package. For a strategic function you don't want the same software as your competitors because that would cripple your ability to differentiate.

#### If It Hurts, Do It More Often

Martin also covered continuous integration and delivery. Most programmers learn early on that integrating their work with others is a frustrating and painful experience. The natural human response, therefore, is to put off doing it for as long as possible.

But Martin's philosophy is, "If it hurts, do it more often".

He explained, "Fact is, the longer you leave integration, the greater the exponential pain you get in return."

Continuous Integration is a software development practice where members of a team integrate their work frequently – usually each person integrates at least daily - leading to multiple integrations per day.

By integrating often, explained Martin, you receive less hurt each time, so that overall, you get less pain. He elaborated, "With continuous integration, each integration is much smaller. And with continuous integration, you find out within a day if you've made an incompatible change. If there's an error, it's going to be small and found out very quickly."

ThoughtWorks also believes in continuous delivery. Each integration is verified by an automated build (including test) to detect integration errors as quickly as possible. In effect, every change in design is continually deployed.

### CYBERSECURITY & CYBERTERRORISM **C**MFERENCE

### CYBERIA: ENHANCING CYBER SECURITY & COMBATING CYBER TERRORISM AUGUST 23-24 | SHANGRI-LA HOTEL | SINGAPORE

After a successful inaugural event in 2010, the International Conference on Cyber Security and Cyber Terrorism returns to Singapore in August 2012.

This conference is co-organised by The Institute of Systems Science of the National University of Singapore (NUS-ISS) and The Association of Information Security Professionals (AISP). The National Defense University's Information Resources Management College (NDU iCollege) and Infocomm Development Authority of Singapore (IDA) are the key supporters of the event.

This prestigious 2-day event features expert speakers from the region and the United States and serves as a premier networking platform for high-level representatives from across Asia.

### Register Now via www.cybersecuritysingapore.com.sg

### Topic Highlights

- A national second factor authentication to enhance public cyber security
- Cyber Security issues in Government and the Industry
- Darknet based Cybersecurity technologies based on global monitoring and analysis

#### Who Should Attend

Senior-level government and private-sector representatives from the U. S. and Far East regional countries needing to form relationships and collaborate on Cyber Security matters. Participants should have the authority to enact changes and improvements in their organizations, as solutions and implementation will be discussed.

#### **Keynote Speakers**

- Singapore and Regional officials
- U. S. Government Cyber Experts
- Private Sector SMEs
- Regional Research Centers

#### Panels Include

- Progress in Regional Cyber Security
- Private Sector Cyber Solutions
- International Cyber Counterterrorism

#### **Breakout Sessions On:**

- SCADA Critical Infrastructure Protection
- Network Attack and Defend
- Cyber Risks and Solutions

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## Leading Researchers from Hungary Share Insights at ISS

Professor Péter Földesi and Professor Laszlo T. Koczy visited ISS to share their research, titled "Optimizing nonlinear and NP-hard logistic problems considering uncertainty and time dependency", with ISS teaching staff on 8 June.

Professor Péter Földesi heads the Department of Logistics and Forwarding at the Széchenyi István University and is also the General Secretary of The Multi-disciplinary Doctoral School of the Faculty of Engineering Sciences.

Professor Laszlo T. Koczy from the Szechenyi Istvan University and previously the Budapest University of Technology and Economics (BME) Hungary has a global resume that includes stints as visiting professor at universities in Australia, Japan, Korea, Austria, Italy, Brazil, China, Finland and Poland.

Their research on transportation systems proved particularly valuable as ISS embarks on an LTA-funded research study on public transport commuter behaviour in Singapore. .



Top: ISS teaching staff attending the research exchange session with Professor Laszlo T. Koczy (center right)

Above: Professor Péter Földesi starting off with his presentation

### From Accenture Coach To ISS Lecturer

In Lee Boon Kee's book, project management is both art and science.

Said the newest faculty member of ISS, "Project management is about motivating people, organising teams and gaining trust – all of which is an art – as well as how to break down and structure work using scientific tools. Both art and science are involved and the challenge for any project manager is achieving the fine balance between the two."

His 23 years in the IT industry have not only given Boon Kee considerable exposure to managing projects of all sizes and scopes, they have also exposed him to teaching others how to manage projects.

Throughout his six years as senior manager at Accenture, he was a faculty member at three Accenture schools based in Chicago: the Accenture Project Management School, Accenture Core Manager School and Accenture Core Consultant School. There, he guided Accenture's consultants and managers on business case development, project planning, and project monitoring and control to prepare them for new roles such as project managers. At Accenture, he also served as a process and solution quality coach.

Boon Kee credits his experience at Accenture and other multinationals for making him realise how much he loves teaching.

"I realised I have always enjoyed teaching and coaching throughout my career, whether I was working as a software engineer, a consultant or project manager in MNCs such as Accenture, HP, Sun Microsystems and NEC. This position at ISS offers me the opportunity to share my knowledge and experience with others, and to promote project management as a profession."

In particular, he hopes to be able to change the emphasis of project management from that of cold methodology to people management. Pointed out Boon Kee, "Traditional project management focuses on methods, structure, processes and tools. However, the ability to motivate people towards a common goal is just as important."

Boon Kee joined ISS as a member of Project Management Practice

He said, "I hope that my career at ISS will be a journey and adventure that I can enjoy and learn from, with the opportunity to inspire and motivate others on their learning journey."

Describing himself as sensitive, caring and patient, Boon Kee strongly believes in integrity. "According to management guru Peter Drucker, followers may forgive leaders for mistakes, but they will not forgive a lack



of integrity. Doing what you say you are going to do will help you build trust, align goals, motivate people, and get things done."

Outside of work, Boon Kee is also a man of passion. He has taken up, at various points in his life, the flute, guitar, swimming and jogging. But his chosen path is also his way of giving back.

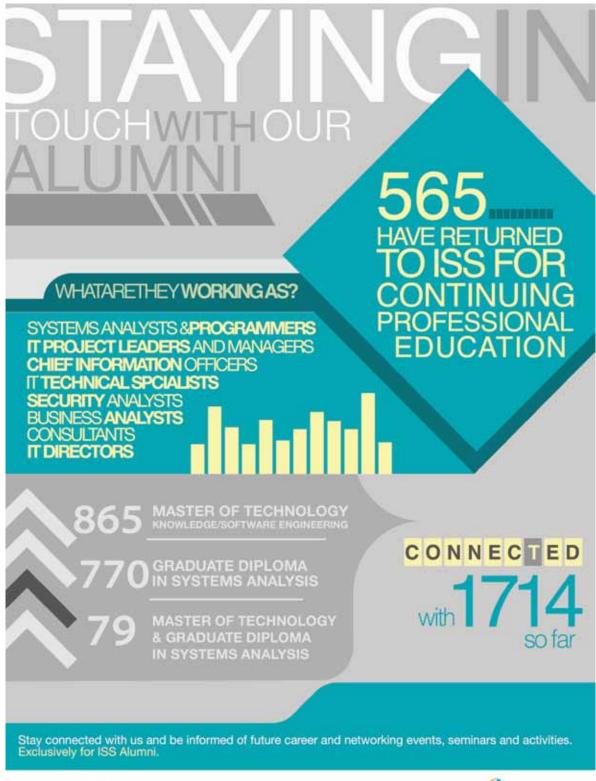
"In my career, I have had the good fortune of having great mentors that have contributed to my growth professional and as a person," explained Boon Kee. "In turn, I would like to leave footprints that would have a positive impact on someone's life."

What gets his adrenaline pumping these days is drumming. His family shares his passion for music – his teenage son is an "awesome" bass player, his teenage daughter "sings like an angel", and his wife is thinking of picking up the keyboard.

"My son and I have played a few times together as part of a band for our church services, with him on the bass guitar and me on the drum. I must say I am very proud that he chose to follow in my footsteps by serving in the music ministry at our local church. I hope one day the entire family can play regularly together as a family band!"

The devoted family man tries to spend as much quality time with his family as possible. He jogs and cycles with his two children around the Punggol Waterway and shops and cooks with his wife and daughter.

In fact, Boon Kee believes so much in parent-child bonding, in April 2010 he organised a version of The Amazing Race for dads and their child for his daughter's secondary school. The race, which took place along the Circle Line, was a big success. But the best part for Boon Kee was the fact that his wife and daughter were also volunteers at the event. "It was a great bonding experience for us."



If you know of fellow ISS Alumni who are not receiving our regular email updates or newsletters, please help us connect with them by having them email issalumni@nus.edu.sg with their latest contacts.



#### The Editorial team

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