Information to Make a Difference in Productivity

Virtual roundtable on KM

Knowledge management (KM) first gained a foothold in large organizations in the mid-1990s. Today, its benefits are recognized by governments, the education and service sectors, and SMEs alike. The Asia-Pacific region is blessed with numerous KM proponents, and the APO News invited four who have worked extensively with the APO to participate in a virtual roundtable discussion. Praba Nair (PN below) is principal consultant on KM and change management at KDi Asia, an international consulting organization based in Singapore, and was a key architect of the APO KM framework. As a long-time KM consultant for many international organizations, Dr. Serafin Talisayon (ST) writes, teaches at the University of the Philippines, and speaks on the topic worldwide. Dr. Ida Yasin (IY) has worked at the Malaysia Productivity Corporation for over 20 years and serves as the Industrial Advisor for the KM Program at the Multimedia University of Malaysia. Her research interests focus on KM and productivity measurement. Ron Young's (RY) work with the ISO committee developing a KM standard and years of KM consultancy for both the private sector and UK government, give depth and breadth to his comments.

APO News: In layman's terms, explain why KM is as important for SMEs as for large organizations including public-sector ones.



Dr. Serafin Talisayon

ST: SME managers or owners have a simple objective: to increase sales and revenues. If they do not see how a KM initiative can help them achieve this, they will reject it outright. This forces the KM consultant to go back to the basics: where and how can KM create value for the SME? In bigger organizations, KM consultants can get away with supply-driven KM approaches, such as storytelling, knowledge inventory, social network analysis, and knowledge sharing that are not demand driven. In SMEs, consultants must start with an area of KM that is not popular: understanding and using customer knowledge. This has the most direct bearing on SME sales and revenues.

RY: First, we need to clarify what type of SME it is. In today's knowledge-driven

economy, an increasing number of SME startups are very knowledge intensive, e.g., software developers, technology developers, and creative designers and developers. KM is a fundamental part of what they do, as knowledge is their primary resource as knowledge workers. If the SME is not as knowledge intensive, such as a more manual manufacturing company, the need for KM is different. It needs to know the needs of customers, markets, etc. and KM helps them focus on this. In both cases, SMEs can benefit enormously from managing their knowledge better to help them grow their businesses and innovate faster, as opposed to large companies that have fragmented knowledge and do not know what they know.



Ron Young

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IY: Knowledge is rapidly becoming the most important asset of all organizations, and SMEs are no exception. SMEs need to manage knowledge for the same reasons as larger organizations. They will gain a competitive advantage through their ability to manage and exploit knowledge. To remain competitive, SMEs must first know what their knowledge assets are, then how to man-



Dr. Ida Yasin

age and make use of them for maximum return. KM can be a strategic weapon for SMEs to develop more sustainable, superior business practices, making them less vulnerable to economic cycles.

Government organizations worldwide are facing challenges as legislative, executive, and judicial bodies continue to evolve into an electronic work environment pushed by paperwork and cost reduction mandates, increased workloads with fewer personnel, and the rapid addition of electronic communication channels for use by taxpayers and citizens. Governments are often the first to need to adopt new approaches to electronic information management. KM tools are increasingly recognized by governments as strategic resources within the public sector. Some of the common challenges that affect the public sector worldwide include enhancing efficiency in public agencies, improving accountability, making informed decisions, enhancing collaboration and strategic partnerships with stakeholders, capturing the knowledge of an aging workforce, and achieving operational excellence.

APO News: Give tips on how to determine where an organization stands with regard to KM implementation.

RY: The APO has an excellent publication entitled Knowledge Management: Facilitators Guide. This contains assessment tools and questions to ask to determine where an organization, regardless of size, is in KM maturity.

PN: One of the questions that organizations should ask is, "Are we losing knowledge as a result of staff attrition?" If the answer is yes, it is an indication that they do not have a proper system of capturing the collective knowledge of employees. In many cases, organization have some form of KM initiative although they may not explicitly call it KM.

APO News: What do you think has been the APO's contribution to propagating KM in the Asia-Pacific? Has it been successful in applying KM to the productivity arena?

ST: KM came to Asia-Pacific countries via local subsidiaries of multinational corporations with KM programs, bilateral and multilateral donor and development financing agencies such as the Asian Development Bank which introduced or required KM in their local projects, and intergovernmental agencies such as the APO, SEAMEO, and PEMSEA. The contribution of the APO is through the NPOs, which generally reached government agencies, the development sector, and SMEs. The free downloadable KM publications of the APO were useful to these sectors.

RY: The APO has done some outstanding work in KM awareness and education. Many NPOs and companies across Asia have good KM awareness. The next important step is to turn that awareness into successful implementation, and, most importantly, to be able to see increased knowledge work productivity. I believe that the NPOs and APO now need to start implementing a collective form of KM both themselves and in companies in each APO member. It is impossible to promote KM effectively through awareness and education alone. It is essential for all to perform KM in daily work, benefit from it, and then help others perform it successfully.

APO News: Based on your experience of working with APO member countries, how would you describe the level and extent of adoption of KM in different countries? Which countries have achieved significant progress and what can other countries do to gain KM momentum? Give examples, if possible.

ST: Competitiveness has shifted from the productivity arena to the innovation arena. Here, Singapore is one of the leaders. When it changed its NPO to "SPRING" more than a decade ago, the Singapore government showed that it had recognized early that KM for innovation is as important as, or perhaps more important than, KM for productivity.

RY: The most advanced are the ROC, India, Japan, the ROK, and Singapore; Malaysia and Thailand are advanced; and Indonesia is rapidly emerging.

(Continued on page 6)



International Solar Cities Initiative

Importance of energy, cities, and Asia

ustainable energy systems are central to current concerns about low-carbon or green development, affecting the global atmosphere and economic development. Environmental risks and technological and economic obsolescence are major challenges to current energy systems. The common denominator of most policy proposals to pursue a sustainable energy path is a shift from big, centralized, risky technologies to those relying increasingly on high-efficiency energy-using equipment and scaled-to-need renewable energy systems. In particular, greater efficiency can reduce the energy required by the transportation, construction, and industrial sectors, thereby reducing carbon emissions.

Since the early 1970s, Asian countries have registered the most rapid economic growth of any region, but with the lowest ecological carrying capacity. Due to rising energy demand, greenhouse gas (GHG) emissions (about 30% of GHG comes from Asia) are also increasing. PR China and India, in particular, are becoming the world's largest sources of "black" carbon emissions.

Modern cities have mushroomed based on a rich fossil fuel supply. The logic of their global rise and regional spread is founded on the availability of powerful, centralized, inexpensive fuels, like coal, petroleum, and natural gas-yielding fossil urban structures. Urban development depends on fossil fuel. Fossil fuels supply 85% of the world's commercial energy, and 75% of this is used to support cities. In this respect, the key question facing Asian countries is whether further urban development will occur in a sustainable manner, or whether it will reproduce the patterns that industrialized countries witnessed in the past. There is increasing evidence that the low-carbon development of cities hinges upon this choice.



Figure 1. Interlinked energy systems in solar cities.

International Solar Cities Initiative

The International Solar Cities Initiative (ISCI; www.iscicities.org) is an international nonprofit organization dedicated to promoting new urban policies and practices that reduce per capita GHG emissions by cities to levels consistent with long-term climate sustainability as estimated by the Intergovernmental Panel on Climate Change. Key contents of the solar city program can be found in the ISCI Declaration and can be summarized as follows.

- 1) Each city sets its own target for renewable energy adoption with a specific timetable appropriate for its geographical, economic, and political circumstances.
- 2) Partnerships are formed between institutes and centers for the mutual development of renewable energy implementation techniques, capacity building in cities, and shared expertise.
- 3) Sister-city relationships are encouraged in renewable energy implementation, end-use efficiency, and climate change policy.

The ISCI started as an International Energy Agency and International Solar Energy Society joint task force in 1999 and became independent in 2003. The ISCI has endeavored to bring scientists and policymakers together, sharing practical knowledge for the transition to sustainable societies where the main energy sources are efficient and renewable. The 1st ISCI Congress on Solar Cities for a Sustainable World was held in Daegu, ROK, in 2004, followed by the 2nd on Solar Cities: Reducing Carbon Emissions from Cities in Oxford, UK, in 2006; the 3rd on Visionary Voices Talk Sustainable Cities in Adelaide, Australia, in 2008; the 4th on Solar Energy Changes Life in Dezou, PR China, in 2010; the 5th on Energy in Cities: Innovation Facing Climate Change in Buenos Aires, Argentina, in 2014; and the planned 6th on Aerospace and Solar Cities (tentative title) in Noordwijk, the Netherlands, in 2016. Each congress comprises a mayors' summit, scientific conference, business forum, citizens' forum, and exhibition.

Policy and technology for solar cities

Major policy areas for solar city development can be divided into three: institutionalization (organization and policy); technology; and knowledge (public participation). The development and deployment of technologies, especially for energy efficiency and renewable energy, are the engines of solar city development. For example, energy-efficient technologies in end-use sectors such as light-emitting diode and fluorescent lighting, supported by appropriate smart monitor-

by Jong-dall Kim

ing and control technologies and green building standards, will help in constructing smart buildings. Intelligent energy information and communication technology will allow the gathering of big, real-time data on energy consumption so that intelligent decisions can be made for savings. Such systems can be employed as part of building/factory energy management systems.

Renewable energy sources like super-efficient solar, offshore wind, ocean wave, and tidal power must also be considered. More efficient photovoltaic panels and offshore wind technologies will create a significant shift in the energy map. The required technology exists and is already being applied to harvest wave and tidal power in some parts of the world, including the Asia-Pacific. Renewable hybrid energy systems will multiply renewable energy sources by providing energy during most weather conditions and reinforce renewability by leveraging synergy among sources. Advanced biomass energy technologies can help realize the potential of millions of tons of available biomass to replace fossil fuels.

Alternative-fuel vehicles will effectively reduce petroleum dependence and pave the way for low-carbon transportation systems. Electric and/or hydrogen fuel cell vehicles are currently being produced by most major automobile companies. Hybrid vehicles can also continue to be utilized supplemented with, for example, solar energy collected on carport roofs or in car parking facilities to power electric vehicles and batteries. Service stations of the future will not only charge electric vehicle batteries but also lease batteries for quick change/charge.

Energy storage systems are an emerging industry with great relevance to renewable energy. Successful applications of this technology will contribute significantly to stabilizing renewable energy flows. In addition, smart grids have multiple benefits. They accelerate improvements in energy systems, increase grid reliability, help consumers save money, and reduce overall carbon footprints.

Water, waste, and land management, encompassing water reclamation, greywater and rainwater systems, low-water landscaping, and water purification and management, are important for cities. Recycling, municipal solid waste salvage, brownfield, and remediation are also areas for waste management. Organic agriculture, habitat conservation and restoration, and urban forestry and parks are closely linked with energy and environmental issues.

Conclusion: a multidimensional approach needed

To sustain solar city development policies, three actions are needed: a legislative foundation; long-term planning and

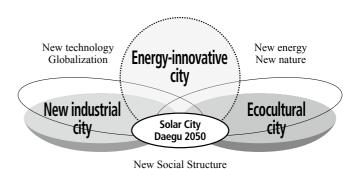


Figure 2. Multidimensional urban planning for Solar City Daegu.

consecutive implementation plans; and the creation and expansion of green budgets. In addition to an institutional base, a multidimensional approach can be effective in integrating energy, industry, and culture. Solar City Daegu can be an example (Figure 2). In Daegu, an innovative system for energy demand-side management and renewable energy will be intensively and systematically introduced. The new industrial dimension will create innovative industries and employment opportunities through promotion of the solar and hydrogen economy. The ecocultural dimension is the provision of clean nature and a healthy culture. This requires public awareness and participation. Thus, solar city programs need broad, deep support at both the highest policymaking and grassroots levels. Partnerships among local governments, businesses, experts, and social groups are vital in any solar city program.



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Lean systems for the service industry

ean manufacturing systems involve the systematic elimination of all types of waste in production and related processes. They require identifying and eliminating activities that do not add value to the process of design, production, logistics, and customer relations and are especially helpful to SMEs.

A workshop on Lean Applications Focusing on the Service Industry was organized by the APO in conjunction with the Thailand Productivity Institute, 15–19 June, in Bangkok. Twenty-two participants representing 14 APO member coun-

tries attended. They were all eager to understand the concepts of and strategic planning for the adoption of lean tools and applications for service organizations, including related elements of Six Sigma.

Three international and one local resource persons led the sessions and discussions. Resource Speaker Prof. T.N. Goh emphasized that lean, along with waste elimination and other practical techniques, had been applied in the service sector with demonstrated success. Prof. Cherdchai Nopmaneejumrusler's presentation on Siriraj Hospital's lean journey contained specific details from the all-important healthcare sector. The Marketing & Distribution Business Group of CP Retailink Co., Ltd. hosted a site visit. The multifaceted CP

Group is involved in retail, international trade, agroindustry, and telecommunications, among others, and relies on lean systems for customer responsiveness.

While participants agreed that the workshop had been valuable, several suggested focusing on lean applications in specific service subsectors in future. Mongolian participant Uranchimeg Byamba commented that her main takeaway lesson was: "Lean is culture, improved by knowledge." Experts and participants unanimously hoped that the APO would organize additional service-sector projects on lean. (2)



CP Retailink Co., Ltd. Vice President Dr. Naris Thamkuekool (standing R) explaining the importance of lean system innovation for organizational productivity improvement. Photo courtesy of Thailand Productivity Institute.

Results-based management for public-sector productivity enhancement

esults-based management (RBM) is a management strategy by which all actors contribute to achieving the desired results. RBM is used in many international and private-sector organizations. As governments worldwide are under pressure to have greater transparency and better governance frameworks, the RBM strategy has become a global trend in the public sector.

A workshop on Results-based Management for Public-sector Organizations was held by the APO in conjunction with the Vietnam National Productivity Institute, 9–12 June, in Hanoi. Twenty-one participants, comprising ministerial officers of 14 member countries, attended. This workshop was part of continuing efforts by the APO to promote RBM application at government and sectoral levels to enhance public-sector productivity.

Participants discussed the benefits and challenges of RBM implementation at national level and learned from the advanced RBM systems in Canada and the ROK under the guidance of experts. At the end of the workshop, they reinforced the findings of the 2014 APO workshop on the same topic: to increase the quality of service to citizens, governments should focus on results, rather than activity and disbursement of budgets; and an individual public organization's efforts in applying RBM must be made in the context of sectoral planning and the national performance framework. Participant and Development Academy of the Philippines (DAP) Vice President Imelda C. Caluen advised that the workshop would not be the last project on RBM. As the DAP was the newly appointed Center of Excellence for Publicsector Productivity, she pledged that RBM would continue to be promoted in the public sector of APO members.

APO News: What can and should NPOs do to promote KM in their countries and how could the APO help them?

IY: NPOs should implement KM themselves. To promote KM, they can offer KM consultancy services to the private and public sectors. The APO can help NPOs by providing a knowledge-sharing platform, community of practice, and expert services. Some of these have been introduced to a certain extent.

PN: For NPOs to promote KM, they must have competence in KM. The current reality is that not all member countries have that capability. It is therefore necessary for the APO to help build the capacity of NPOs. Only then can they promote KM in their countries. We need to move from awareness to competence. Just as the capability of NPOs in implementing productivity and



Praba Nair

quality programs was developed in the past, the capability to undertake KM programs needs to be to be built up.

APO News: Could you share an interesting personal experience where KM made a difference to an organization?

ST: An SME in the printing business was having problems with delayed deliveries of end products to customers, threatening its reputation for reliability. It was difficult for the owner to physically check the status of each of more than 20 ongoing job orders, each involving about 30 steps from customer inquiry to delivery of the end product. Its production area occupied two floors of a big building. The solution proposed and implemented by a senior manager was to set up an online Google Docs where every staff involved in a process updates the status of the step he/she is responsible for 24/7 and flags potential issues. A short (15–30-minute) "lessons learned" session is held after each delivery, whether successful or delayed. The tool is simple, inexpensive, and the SME owner-manager is very happy with it.

IY: I introduced KM to an organization, but unfortunately most of the staff were reluctant to come onboard. There was no buy-in. Then I decided to use the APO KM Framework to start KM initiatives without them realizing that

they were KM. After a few months, we saw small achievements and some staff were happy to share success stories. The strategy is, start with the low-hanging fruit. Then I explained KM again, citing the example of small achievements. The staff were then more receptive to KM.

APO News: What is your view on the future of KM in Asia and globally?

ST: KM is beset by several issues: 1) There is no commonly agreed or accepted set of standards. 2) Since KM started in the business sector instead of the academic sector, practice is ahead of theory. 3) The word "knowledge" is defined differently by KM gurus compared with standard dictionaries such as Merriam-Webster, leading to much confusion. 4) It overlaps greatly with other fields such as IT, human resources, and quality management. 5) Alignment of KM with organizational objectives is not given enough attention and may even be disrupted by KM models based on the knowledge cycle or maturity stages, which often have no direct linkage to organizational targets. Nevertheless, a PhD dissertation concluded that KM was not a fad. KM publication numbers have exploded since 1990 and continue to do so. The consensus among several KM experts is: the term KM may disappear in the future, but managing knowledge is here to stay because of the simple reality that the global economy is largely a knowledge economy (three-fourths of GWP is from knowledge; only one-fourth is from extraction and processing of natural resources).

RY: Most organizations, globally and in Asia, have embarked on what I refer to as "operational KM," i.e., incrementally improving the way they manage their knowledge within existing structures. What is lacking is strategic KM, which is looking at KM not incrementally but in a transforming way that will make a big difference in helping organizations achieve their vision and objectives and make them far more knowledge driven. This requires a more focused approach to KM, referred to as "knowledge asset management." Knowledge cannot be measured, but knowledge assets can. The ISO is working on a KM standard, and I hope to be part of the discussions, on behalf of the British Standards Institution, to help influence the standards on knowledge asset management and knowledge work productivity.

Please go to the APO website for the unabridged version of this interview.

New officer at the Secretariat

1 June marked the start of employment at the APO Secretariat for Administration and Finance Officer Itaru Nakamura. The Tokyo native holds a Bachelor's degree in Psychology from Kyoto University and is a certified tax accountant and certified public accountant under the Japanese and US systems,



respectively. He has more than 20 years of experience in the private-sector finance field, much of the time in IT-related organizations with international business interests. Although he has only been at the Secretariat for a short time, he already feels the various differences between the private and public sectors and finds that he is enjoying those sometimes subtle differences. Nakamura also feels that "working as one team" counts for the most in both sectors. Married with no children, he enjoys taking his dog (an elegant white Chihuahua named Pearl) for a walk to various places around Tokyo, but he is also, somewhat unusually, a cat lover. Films, going to the theater, and listening to American pop music from the 1960s era are also high on Nakamura's list of things to do in his leisure time.



New APO e-publication

Agricultural Biotechnology and Global Competitiveness

ISBN: 978-92-833-2462-1 (PDF edition)

This volume is a compilation of papers presented at the Asian Food and Agribusiness Conference 2013: Biotechnology and Global Competitiveness. Coverage includes trends in biotechnology applications, commercialization



of agricultural biotechnology, risk management for sustainability, and roles of biotechnology in enhancing Green Productivity and the competitiveness of agricultural products.

Photo news



Delegates from Sri Lanka at the APO Secretariat during the Individual-country Observational Study Mission on Quality Customer Service through Productivity Enhancement on 19 May. (L–R): National Productivity Secretariat Assistant Director (Training and Promotion) Aluthge Don Yashika Anandani; Bank of Ceylon Business Process Re-Engineering Project Chief Manager Thavamanydevi Mohanasundaram; APO Secretary-General Mari Amano; Bank of Ceylon Business Process Re-Engineering Project Senior Manager Jayakody Arachchige Lakshman Jayakody; Bank of Ceylon Uva Province Office Assistant General Manager Thennakoon Mudiyanselage Thilekeratne Tennakoon; and APO Industry Department Director J.M. Thilaka Jayasundara.



Registrar Corp. Vice President David Lennarz giving a presentation at the APO-Registrar Corp. Seminar on US Food and Drug Administration Regulations for Japanese Manufacturers and Exporters of Food and Beverages, Tokyo, 20 May.



Demonstration of traditional hand-stretching of somen (wheat) noodles at the Ikeri Co. Ltd. factory in Miwa, Nara prefecture, during the multicountry observational study mission on Branding Local-specific Agricultural Products through the Use of Geographical Indications, 25–30 May, Japan.



Celebration of Productivity Day in IR Iran

R Iran celebrated its 18th official Productivity Day on 17 June. Productivity Day is marked in a variety of ways to spread a productivity culture among all Iranian citizens. For example, NIPO Head and APO Director for IR Iran Dr. Roya Tabatabaei Yazdi visited Roshangar High School, a girls' school with some 250 students in Tehran chosen as a symbolic representative of the educational sector in the country, on 14 June to let students know in advance that Productivity Day was on the way. She was accompanied on the visit by Deputy Minister of Education and Training S.M. Bathaei, and they were received by Headmistress Farzaneh Razmahang.

In his remarks to the student body, Deputy Minister Bathaei thanked Dr. Yazdi for her efforts to promote productivity and emphasized that the true meaning of productivity was "making the best use of all available means and resources." He declared that the Ministry of Education and Training was determined to raise its own productivity, leading in turn to higher productivity throughout all educational institutions nationwide. The new slogan "There is always a better way, and 'productivity' is choosing that better way" was introduced to the school to encourage innovative solutions in daily activities. Dr. Yazdi's address



Dr. Yazdi ringing the school bell three times to welcome the arrival of Productivity Day, as Headmistress Razmahang (far L) looks on. Photo courtesy of NIPO.

emphasized that, "We should all think about productivity all the time."

The visit to Roshangar High School was capped off by a bell-ringing ceremony before the start of classes. Dr. Yazdi rang the melodious school bell three times to welcome the arrival of Productivity Day, ensuring that "the better way" remained on students' minds. (2)

Contributed by Mitra Alipour, NIPO International Affairs Officer and APO Liaison Officer for IR Iran.

e-Marketing of agricultural and food products: The easiest, fastest, and cheapest way to reach consumers

he APO, in partnership with the China Productivity Center of the ROC, organized a training course on e-Marketing of Agricultural and Food Products, in Taipei, 11–15 May. Twenty-four participants from 12 countries attended, with three resource persons from Malaysia, the Philippines, and Singapore and two local speakers.

The topics covered in the training course included an overview of e-marketing and e-agribusiness, e-commerce challenges and opportunities for agribusiness and food SMEs, and framework for developing an effective e-marketing system and campaign. The experience of the Wonderful Food Company in the ROC was also described. Hands-on exercises focused on: consumer-oriented marketing strategies for primary farm produce and processed products from the perspective of e-agribusiness; webpage design, development, and management; building e-business sites using social media platforms like Facebook and LinkedIn; and creating a free online video channel.

In addition to lectures, hands-on exercises, and sharing of country experiences, the participants visited the Farm-Direct Company, a social enterprise engaged in e-marketing of fresh



Resource Person Dr. Kheng Soon Rodney Wee guiding participants during a group exercise.

food. The company promises that its business begins with farmers and consumer welfare in mind. Customers use Farm-Direct's app and website to place orders for items such as fresh fish, fruit, meat, and vegetables. To compete with supermarkets, consistency in product quality and rapid delivery of orders are ensured, while the profits earned are modest.

On the last day of the course, participants evaluated the program activities and made informal commitments to utilize and disseminate the knowledge and skills gained.