Asian ICT Council Newsletter

Edition 2, Dec. 2011

Chairman's Message

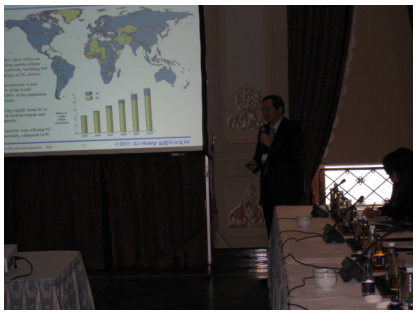
We are pleased to publish the second edition of the Asian ICT Council Newsletter.

This edition features a report on this year's breakout session of the Asian ICT Council, which was held in Istanbul, Turkey on March 7, 2011 during the 25th CACCI Conference. During this session, invited speakers made presentations on 3G services, cloud computing, the status and prospects of the ICT industry in Turkey, and the latest developments, trends and opportunities in Taiwan's ICT sector. There were more than 40 participants who were in the ICT field. They were from Turkey, Iran, Taiwan, India, Sri Lanka, Nepal and Pakistan.

This issue also contains various reports on Cloud Computing, the ICT Industry in Vietnam, and Internet TV. We hope you will find this issue interesting and informative, and encourage you to contribute articles to the future issue.

Dr. Gwo Jiunn Huang
Fellow, Institute for Information Industry

Asian ICT Council Holds Breakout Session in Istanbul



Dr. Huang gives a presentation on the current ICT Trend

Dr. G.J. Huang, Chairman of the Asian ICT Council (AICTC) and fellow of Institute for Information Industry (III), chaired the Breakout Session of the Asian ICT Council during the 25th CACCI Conference held on March 7, 2011 in Istanbul, Turkey.

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Dr. Huang also serves as one of the session speakers. In his presentation, Dr. Huang briefly spoke on the rise of 3G. He noted that:

(a) an estimated 5.3 billion mobile cellular subscriptions worldwide, including 940 million subscriptions to 3G services, have been registered;

(b) Access to mobile networks is now available to 90% of the world population and 80% of the population is living in rural areas;

(c) People are moving rapidly from 2G to 3G platforms

(d) in both developed and developing countries. In 2010, 143 countries were offering 3G services comercially, compared with 95 in 2007;

(e) Currently in developing countries, 72.4% of households have a TV, only 22.5% have a computer and only 15.8% have Internet access, compared with 98%, 71% and 65.6%, respectively in developed countries. At the end of 2010, half a billion households worldwide (or 29.5%) had access to the Internet.

CACCI President Amb. Benedicto Yujuico presents a token of appreciation to speaker Mr. Wei-Hsiung Huang.

The second speaker was Mr. Yusuf Ata Ariak, Chairman, Telecommunication Sector Assembly of Turkey. He touched on Status and Prospects of the ICT Industry in Turkey, noting that:

(a) Total revenue for ICT in 2010 was US$24.2 billion, revenue for telecommunication services in 2010 was US$16.8 billion, and revenue for information technologies in 2010 was US$7.4 billion.

(b) Prospects for the ICT sector are bright, with total export value of US$500 billion to be made in 2023 and with total employment of 1 million people in the IT sector.

The last speaker was Mr Wei-hsiung Huang, Product Manager at DMP Electronics Inc., which offers industrial PCs. Speaking on “The Latest Developments & Trends of Taiwan’s ICT Sector & the Opportunities”, Mr. Huang said that:

(a) In 2010, over 83.32% of Taiwanese ICT products were not produced in Taiwan. The majority of them were produced in China;

(b) Suffering from rising labor cost and labor shortage in eastern China provinces and lured bygovernment incentives, most of the Taiwanese ICT companies have started moving/established production facilities in mid-western China provinces and Si Cuan Province is becoming the new capital for ICT production in China;

(c) Rising exchange rate against the US dollar and increase in oil and commodity prices have put tremendous pressure on the cost and profit margin of Taiwanese ICT companies.

Cloud Computing - The Next Industrial Revolution

By Scott Stewart
CIO, Chief Information Officers Magazine

The term 'Cloud computing' continues to receive a lot of attention from the media, and within the IT industry there is perpetual debate on definitions and from vendors a relentless succession of press releases on their latest Cloud offerings.

Cloud conferences are on the increase and every industry event has a track on Cloud computing and within organisations we hear of Cloud strategies being announced and VPs being anointed to lead them.

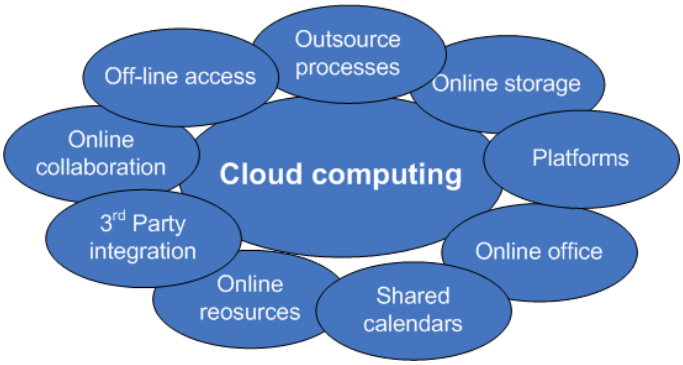
The hype on Cloud is still more prevalent than the adoption, however research continues to point to the increasing and rapid adoption of Cloud computing and its inevitable shift to mainstream.

But what is causing this shift and what is the real change that is occurring?

How much of this disruption that we call Cloud computing is actually caused by technology and products or are there other driving forces of change at play?

What if the real change is below the surface, a tectonic shift occurring in the attitudes and behaviors of customers and how they want to buy their IT?

There is no real definition for Cloud computing



The same question continues to be asked about Cloud computing: what *is* Cloud computing?

The IT industry seems more confused than ever before as it struggles to define and pigeon hole this disruptive change and there seems little agreement or consensus on what Cloud computing actually is.

In the US, the National Institute of Standards and Technology (NIST) attempted to alliviate the situation by putting out a definition - but this is now in version 15, has more than 760 words, includes five characteristics, three service models and four deployment models. It also comes with a disclaimer that, in essence, says their definition is likely to change. So they don't really know how to define what Cloud computing is because it is a changing paradigm.

Presenters at Cloud conferences cannot resist putting up their own new definitions, when Web search engines are queried on 'what is

Cloud computing' they return an increasing number of new results each day and the tweets continue to scroll down with many different viewpoints as the pro and ante Cloud camps continue to posit their own new theories and definitions.

On top of all this, many vendors are simply taking their existing services and products such as hosting, outsourcing and co-location and rebranding them as a 'Cloud' product which means that their definition of Cloud is translated into ‘our product’.

But while the IT industry grapples with the definition and argues amongst itself about whether this is something new or just a fad or hype, many in the industry are also just sitting back to see what happens. Sadly they may be missing the real point that this Cloud computing disruption is not about a technology, it is not about a product, it is not about a service offering, it is not something that we have always done, it is not even about a deployment model, rather it is a transformation, a paradigm shift and a change in attitude and behavior that is occurring under their very noses.

Customer’s attitudes and behaviors towards how they want to buy IT are changing forever and this is the real transformation that is occurring. Sadly, many vendors may not be prepared for it.

Despite the criticism here of the various attempts to define Cloud computing, some much-needed thought leadership comes from Simon Wardley of CSC’s Leading Edge Forum in the UK, who bravely adds his definition of Cloud computing to the confused mix:
“Cloud Computing is a generic term used to describe the disruptive transformation in I.T. towards a service based economy driven by a set of economic, cultural and technological conditions”.

Cloud computing is a fundamental shift of the IT industry from a product based industry to a services based industry driven by factors other than just technology and products. This lifts the current thinking of Cloud computing out of the technology product space and into the realms of economics and culture, attitude and behaviour.

Looking deeper into Simon’s definition and his thinking on this, we find that he also presents the best comparative analogy of Cloud computing ...the industrial revolution.

The industrial revolution

The Industrial revolution can be loosely described as a broad socio-economic and technological transformation that occurred in the period from the 18th to the 19th century.

It was a shift from cottage based product manufacturing to centralized and mechanized factory manufacturing which had broad socio-economic impacts across many countries. Similar to Cloud computing there seems to be no single definition that everyone agrees on and even 200 years later you will find many different viewpoints on how to define what was the industrial revolution.

But one thing we do know, it came, it happened,

everyone adopted the new approaches and no-one could stop it, not even the Luddites who tried. We also know that it was a series of changes over a long period of time and no-one stopped to think about the definition of what they were doing, there were strong business and economic drivers and it just made sense to change the way things were done and the behaviors and attitudes shifted to suit the new approaches.

Taking a very simplistic approach the industrial revolution started with some long understood concepts, then there was the suitability of the manufacturing practices for this change, then the technology emerged to support the changes in practices and most importantly there was a shift in attitudes and companies became willing and wanting to adopt these new approaches.

Cloud computing is not about the technology waiting for the change to arrive but it is about a change that has been waiting for the technology, and with the current shift in attitudes we now have all the pieces falling into place to herald the next big industrial revolution.

Wardley suggests that there are four components that made the industrial revolution happen and it is clear to us that these same four components exist today that are making the Cloud revolution inevitable for all of us.

The changing attitudes

There are strong indications of rapidly changing attitudes within organisations and a shift in the desired approach for buying IT evidenced earlier this year when two Australian financial services organisations announced plans for an aggressive adoption of Cloud computing.

The CBA bank (ASX:CBA.AX), with more than 7 million customers and arguably the flagship of technological innovation for financial services in this region, made some startling announcements about its shift to Cloud computing, but more importantly revealed it was driven by a new attitude and behavioural shift towards the way they buy IT. When Group Executive and CIO, Michael Harte, announced the move to Cloud computing he said:

> "We're saying that we will never buy another data centre. We will never buy another rack or server or storage device or network device again"
> and...
>
> "We only want to pay for what we use, we want to get out of infrastructure computing and into fine-grain components and highly granular data, so that our customers enjoy new services. This is not about some technical breakthrough; it is about supplying customers the services they want — and doing that at value."

The prestigious Wilson HTM Investment Group (ASX:WIG), a 115-year old stockbroker and wholesale/retail fund manager, announced a $16 million deal to move its entire IT to the 'trusted' Cloud computing platform provided by Australian Cloud provider, IntraPower (ASX:IPX).

Similar to the CBA, a big driver for Wilson

HTM was the shift to only paying for the IT that they use and it sees a radical shift away from big hit capex, annual licencing fees and lump sum software development costs to a streamlined model where they pay for all their IT on a per user per month basis and this allows for greater granularity and also mean that they pay much less for some users and all based on their actual usage.

At the time the author Mr. Scott Stewart was quoted in the ASX release:
"There is a major transformation going on in the IT industry and this is driven by the business requiring greater scale, flexibility and agility. The problem with the traditional IT model is having a large proportion of IT resources and budgets tied up with just keeping the lights on and managing a large scale infrastructure inventory all of which rarely confers any real strategic advantage to the business.

Unlike the high cost and high risk outsourcing, hosting and traditional in-house "one-to-one" infrastructure models, the new trusted Cloud computing model is a "one to many" model where you can pay to access state-of-the-art shared infrastructure, as and when you need it, allowing you to scale up or down quickly when required, all at a much lower cost than trying to do all this yourself".

On the issues of security and privacy both organisations stated that these issues were the easiest to overcome and were actually greatly improved under the new model, which is at odds with the current chorus of concerns about Cloud computing.

Perhaps this is in part linked to fear and resistance to change displayed by some quarters of the industry, but more importantly the willingness of these financial services organisations to make these changes and therefore work on solving and overcoming the usual hurdles.

Clearly there has been a change of attitude of tectonic proportions for the country's largest bank and then one of the country's oldest and most respected stockbrokers to announce to the market such a transformational shift to Cloud computing.

Without a doubt there are deep business drivers at play here, competitive and economic benefits of "industrial revolution" proportions and according to the research analysts at IDG there are many more organisations lining up so they don't fall behind in the competitive stakes. So, while there isn't really a good definition for Cloud computing and Cloud computing isn't actually something new, let us accept that instead, the term describes the transformation of the IT industry from product based to a services based economy, not driven by a technology or a product, but by changing attitudes and behaviours of the customer. The next big Industrial Revolution is at hand and this is an industry whose time has come.

(Source: Chief Information Officers Magazine, Oct. 25, 2010)

ICT Industry Can Bring New Power to Vietnam's Economy

By Huy Phong
Contributing Editor, VietnamNet Bridge

The boom of Vietnam's information technology (IT)-communication industry, especially the strong development of the telecommunication sector, has attracted the attention of many of the world's big investors. The industry is expected to become a new power in Vietnam's economy in the time to come.

Two telecom enterprises, MobiFone and Viettel, unexpectedly top the 2010 list of 1000 biggest corporate income tax payers which has been released several days ago (http://vietnamtop1000.vn/). The surprise is that the telecom companies have surpassed the "big guys" in very important fields of the national economy, banking, real estate and oil and gas, to lead the biggest tax payers.

The ranking was made based on the total sum of corporate income tax companies paid in the last three consecutive years.

In recent years, the booming development of the telecom sector in Vietnam has been reflected in the high growth rates of three biggest telecom networks, MobiFone, VinaPhone and Viettel.

In 2005, MobiFone gained the turnover of seven trillion dong, while the figure rapidly

rose to 14,500 billion dong in 2007, an increase of 40 percent over 2006. The figure continuously increased to 31 trillion dong in 2009, an increase of 82 percent in 2008.

Similarly, Viettel has also witnessed very impressive growth rates, always at 3-digit level. In 2005, the turnover of the telecom company was modest at 3.1 billion dong. However, the figure rose sharply to 7 trillion dong in 2006 (increasing by 125 percent), to 16.3 trillion dong in 2007 (+132 percent), to 33 trillion dong in 2008 (+102 percent), and then to 60.2 trillion dong in 2009 (+ 94 percent).

Market opening helps develop the market

The Ministry of Information and Communication formerly the Ministry of Post and Telematics, has been recognized as deserving credit for developing the market. It was the policy on opening the market and allowing different economic sectors to provide telecom services that has helped eliminate the monopoly, create a healthy competition, and thus help reduce charges and stimulate the demand.

The demand for telecom services by Vietnamese enterprises and individuals has

been increasing steadily thanks to competitive service fees which make it affordable for the majority of Vietnamese people.

As telecom services are accessible to the majority of people, other services have also been developing because investors can update information regularly. Though expenses on mobile phones and Internet have been increasing, subscribers are ready to pay money for the services because the services help them increase their income.

Mobile phones can help an office worker earn several million dong more a month, though he has to pay several hundreds of thousand dong more for telephone bill. At present, an worker will call it a "big trouble" if he forgets mobile phones at home, because he would miss tons of business opportunities.

Telecom growth will have direct impacts on GDP

In April 2009, at the workshop to discuss the prospect of 3G services in Vietnam, Deputy Minister of Information and Communication, Le Nam Thang, gave an example to show the link between the telecom development and the economic growth rate. Surveys have pointed out that once the number of people using broadband Internet connection increases by another 10 percent, this will generate a GDP growth rate of 0.6 percent.

The Prime Minister's IT envoy, Dr Do Trung Ta also said in an open online dialogue recently: "3G is a broadband system that allows services to stably develop around it, thus creating indirect impacts on the economic growth.

Which way for Vietnam's economy?

It is undeniable that the boom of IT and telecom in Vietnam has paved the way for Vietnam's economy to enter a new phase of development.

Vietnamese companies now not only focus on development the domestic market, but they also think of making outward investments. Viettel, for example, has recently invested in Laos, Cambodia, Haiti and Mozambique.

Now is the time for Vietnam to forget distant targets, such as the target of obtaining one billion dollars worth of software export per annum. One billion dollars is now just equal to half of the annual turnover of a mobile network. The strong development of telecom services, IT and Internet applications in production and business in Vietnam show much bigger potentials for development of the national economy.

Singapore, Hong Kong and Taiwan are not the most powerful countries in software outsourcing, but IT, telecom and Internet applications have always been playing a very important role in their economies. These are examples for a new trend, a new way that can help Vietnam's economy to grow to an international scale.

(Source: VietnamNet Bridge, Nov. 25, 2010)

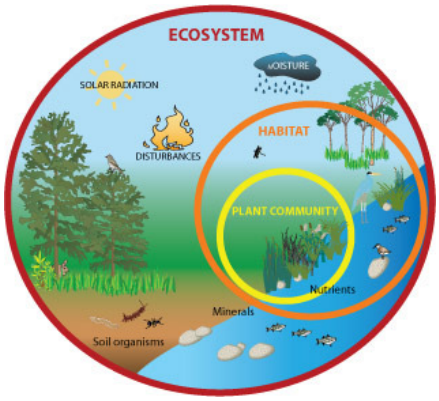
Cloud computing to change India's IT ecosystem

By Shilpa Shree
Editor, Tehelka

Cloud computing, the internet-based information technology (IT) infrastructure, is predicted to change the ecosystem of IT usage in India. If one takes into consideration what chief information officers and companies' IT representatives spelt out during a brainstorming session in Mumbai on Friday, cloud computing should go beyond what its many naysayer think.

"We will see a 10-fold increase in usage of cloud services over the next five years," said Praveen Bhadada, manager at IT consultancy firm Zinnov. "This growth is expected only from public cloud computing services."
There are three types of cloud. One is public, where the server is hosted by a third party which is open for all companies. Second, private cloud hosted by a company for internal usage and the third – a blended cloud – where a company has some of its core services hosted privately and non-core services hosted publicly.

The growth of cloud services, which was stunted since two years due to recession, is set to change with the Indian information and communication technology (ICT) spend forecast to reach $71.9 billion in 2011. This is a 10.3 per cent increase from the 2010 spend of $65.23 billion, according to technology consulting firm Gartner Inc.



Speakers at the Cloud Commune 2010 forum spelt out the different ways of attracting more consumers to the cloud ecosystem. Bhadada said, "The growth of cloud continues to be challenged, but the industry as a whole is working towards solving it."

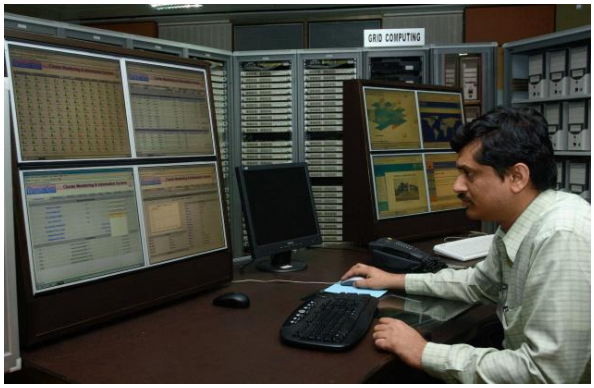
The roadblocks for growth are: companies' unwillingness to change; doubts in service-level agreements (there have been instances of server failure); unavailability of last-mile connectivity; frequent power cuts; vendor locking (if a company decides to move from one cloud service provider to another, there are integration issues) and interoperability. Cloud computing enables various IT services to be delivered over the internet. Services could either be related to infrastructure, platform or software. Its current market size is around $110 million in India, which is expected to touch $1.08 billion in five years, according to Zinnov's research.

A recent study done by Gartner has identified cloud as the No 1 trend that would change IT and the economy in the next 10 years, followed by the business impact of social computing, context-aware computing and pattern-based strategy.

(Source: Tehelka, Nov. 26, 2010)

Why supercomputers will live only in the cloud

By David Linthicum
Writer, InfoWorld



The new public beta of Cluster Compute Eight Extra Large is Amazon.com's most powerful cloud service yet. Its launch indicates that Amazon Web Services (AWS) intends to attract more organizations into high-performance computing. AWS's cloud for high-performance computing applications offers the same benefits as it does for other applications: It eliminates the cost and complexity of buying, configuring, and operating in-house compute clusters, according to Amazon.

The applications include physics simulations, seismic analysis, drug design, genome analysis, aircraft design, and similar CPU-intensive analytics applications.

This is a core advantage of cloud computing: the ability to access very expensive computing systems using a self-provisioned and time-shared model. Most organizations can't afford supercomputers, so they choose a rental arrangement. This is not unlike how I had to consume supercomputing services back when I was in college. Certainly the college could not afford a Cray.

The question then arises: What happens these advanced computing services move away from the on-premise hardware and software model completely? What if they instead choose to provide multitenant access to supercomputing services and hide the high-end MIPS behind a cloud API?

This model may offer a more practical means of providing these services, and supercomputers are not the only platform where this shft may occur. Other more obscure platforms and application could be a contender for the cloud-only model, such as huge database services bound to high-end analytics, geo-analytics, any platform that deals with massive image processing, and other platforms and applications that share the same patterns.

I believe that those who vend these computing systems and sell about 20 to 30 a year will find that the cloud becomes a new and more lucrative channel. Perhaps they will support thousands of users on the cloud, an audience that would typically not be able to afford the hardware and software.

(Source: Infoworld, November 23, 2011)

Internet TV to cover 60 percent of households by 2014

By Rachel King
Writer, ZDNet

Internet-connected television is expected to surge in the next three years as interest in connected devices grow, according to global consulting firm Bain & Company.

Specifically, at least 60 percent of households will have Internet TV by 2014 — at least in the countries where the survey was conducted. Results are based upon the responses of more than 3,000 consumers in the United States, the United Kingdom, France, China and India.

While the survey does cover video games and even online options for cultural activities, the real focus and shift will occur around connected video content.

However, Bain also posits that even though there might be consumer demand for this technology, the profits might not all be there for businesses unless they can develop better and more innovative ways for experiencing this kind of connected content.

One could argue that the challenge is enabling consumers to be able to find new content in a more personalized fashion — a problem that digital media providers like Netflix and Pandora grapple with on a daily basis.

For now, the most common approach seems to focus on the user rather than their social networks. In the U.S. and the U.K., at least half of respondents replied that they rely on search engines to find content, but only a third rely on friends' suggestions and favorites.

However, that's not the case in China and India, where almost half (45 percent) actually leaned more on their social networks for finding new content. The problems in these two countries, Bain notes, is that they lack much of the infrastructure needed for viewing video on connected devices.

Nevertheless, roughly 75 percent of respondents in China and India seem to be willing to pay for webisodes and other short format content. There is slight interest in this regard in the U.S. and Europe, but two-thirds of respondents weren't interesting paying.

(Source: ZDNet, November 22, 2011)