

> TRANSFORM

A FutureGov Supplement

RUN BETTER GOVERNMENT



DELIVERING MORE FOR LESS

Business Intelligence to maximise public value

MOBILE GOVERNMENT: ANYTIME, ANYWHERE

Govt services on the go

THE FUTURE STATE:

How govts can become resilient, sustainable and inclusive



With Compliments



The Changing Face Of IT In Healthcare

FIVE PERSPECTIVES

This report draws commentary from hospitals and healthcare experts in India, Australia, Indonesia and Singapore. Through a series of in-depth interviews and case studies this report highlights some of the key elements hospitals and healthcare providers consider when they are modernising their IT systems:

- › Hospitals are expecting IT to provide ways to control financial and asset management, typically found through administrative modules.
- › IT is important for making the hospital more efficient and cost-effective through the strategic use and adoption around managing patient information.
- › IT is critical for reducing the time for decision making, both in the clinical context and for streamlining processes.
- › Business Intelligence is a combination of management-oriented and clinical-oriented perspectives, a good metric on how to make the hospital more efficient.
- › Business Intelligence can be mined for more predictive-type analytics, such as disease management, risk profiling and more.
- › The greatest hurdle around implementation and adopting an integrated ERP is around staff education.
- › Streamlining is a direct means to save on hospital costs, also reducing stress on patients.
- › The heart of the problems between legacy systems and customisation is how deep can the integration go to streamline platforms?
- › Today's hospital should first have good administrative ERP systems.

The Future State: Productive, Engaged, Sustainable

Transformation thrives in the minds of policy makers but remains in the hands of a nation's people. The days when the government was the sole change agent are long gone. Today, it is the people who mandate change. People want a Productive State; a Sustainable State; and a State that is Engaged

with its Citizens. This white paper looks at the various aspects of the three over-arching themes of Productivity, Engagement and Sustainability, and why it is now imperative for governments to invest in technology to become a Productive, Engaged and Sustainable State for future.

To request a full copy of any of either of the research reports,
please contact chris.white@alphabet-media.com

Catch us at www.futuregov.asia/research



FEATURES

04 THE FUTURE STATE: RESILIENT, SUSTAINABLE AND INCLUSIVE
A look at how governments are balancing the twin challenges of efficiency and accountability while coping with increasing citizen expectations.



09 MAKING AUCKLAND A GREAT PLACE TO LIVE
How Auckland Regional Council Group implemented a system to help make accurate business decisions.



12 MOBILE GOVERNMENT: ANYTIME, ANYWHERE
The impact that mobile devices will have on the future of government services and outreach.



16 DELIVERING MORE FOR LESS
Business intelligence and performance management tools are increasingly being used to optimise budgets, increase accountability and maximise public value.



20 TAX AND REVENUE MANAGEMENT: A GOVERNMENT'S LIFEBLOOD
Taxes are one of life's only inevitabilities. What are governments in Asia doing to ensure easy tax filling and reduce tax evasion?



24 TRACKING KPIs ACROSS THE HEALTHCARE ENTERPRISE
How the need for performance management and reporting standards led to the decision to implement an enterprise wide business intelligence solution.



26 UNLOCKING PUBLIC VALUE
What analytics will do for exception reporting, alert notifications and benchmarking, to establish baselines and performance targets.



30 GOVERNMENTS AND SOCIALISING
The increasing use of social media by governments to provide greater transparency and more timely and convenient access to official information.



34 HELPING TO ENERGISE HIGHER EDUCATION AND RESEARCH
How India's first energy specific university created a better experience for all staff and past, current and future students.



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EMBRACING CHANGE

From my conversations with senior public sector officials in the recent past, two salient but opposing outlooks seem to have gripped their ranks: one is wary, weary and cynical, fearful of the tumultuous changes and unpredictable outcomes of recent events that have affected governments--the rapid changes in technology, the explosion in the volume of data their organisations have to deal with, and a louder, savvier citizenry making its voice heard.

But the majority seems to have the opposite outlook: it is optimistic, enthusiastic and open about these very same developments. It feels empowered by mature technology and sees possibilities and options, and a chance to free itself of inertia that it finally has the tools to counter.

Rapid urbanisation and the chance to include whole-of-citizenry have brought the administration of the city and the state to the fore as one of the main issues in national governance. This issue of SAP Transform--a supplement to FutureGov Asia-Pacific magazine--explores the challenges and the opportunities inherent in running this Future State, and making it future-proof. Within the following 36 pages, you will get a glimpse into how the public sector is remodeling itself for 21st century needs and is operating better, deciding better, collaborating better, and adapting better within the changing mandate.

We examine how mobile governance has emerged as a key factor in leading the change-process within digital inclusion--several developing countries are looking to bypass the expensive and silo-based desktop model of connectivity using cell phones, tablets and other mobile devices. We also explore how citizen engagement, through social media and open data initiatives, has allowed



Jianggan Li

*Editorial Director
FutureGov Magazine*

governments to use the pool of citizen skill and knowledge in unprecedented ways.

Environmental sustainability is an aspect that can no longer be ignored on a stage that ties local decision-making to global consequences. In our age of instant and wide-ranging connectivity, agility is taking on a whole new meaning; as preparing for the unknown and taking into account every conceivable parameter becomes impossible, how do we ensure that we are left standing--and possibly stronger--after major crises?

The public sector, I feel, is undergoing massive changes in almost every country I've engaged with. Transformation is coming: willingly in some cases, and kicking-and-screaming in others.

Whether a deepening cynicism leads to an Orwellian dystopia, or a meaningful and willing process of change leads to a Star-Trek-like universe of cooperation and social evolution will ultimately rest in the hands of governments themselves. Isaac Asimov once said: "The saddest aspect of life right now is that science gathers knowledge faster than society gathers wisdom." The following pages, then, are arguments and cases for policy and administration catching up with technology.

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> THE RUN BETTER GOVERNMENT

The Future State is all about making things Run Better. The idea is to introduce strategies that ‘interrupt the norm’. That changes the service-paradigm. That drives new behavior. That catapults the Nation into the next era of development and excellence.

In this Facebook and Twitter era, not interrupting the norm is not an option!

The first step towards the Future State is Innovation. If you do not innovate, you cannot transform. And only through transformation does a Nation realize the Future State.

The good news is that we are seeing transformation across Public Services. In Healthcare, for example, new IT applications connect patients, care providers and their families through medical monitoring software and mobile devices to better manage their health with individualized treatment plans and educational content.

In Education, you can now have lectures streamed live; coursework taught via collaboration rooms; examinations that give you instant results; and every course asset used, archived for retrieval -- anytime, anywhere, anyhow. And by the way, your lecture hall is in your pocket. It is on-device!

Now, that is Innovation! It is a paradigm shift.

An innovative culture is a resilient one. The string of natural disasters in recent years, inflicting wide-scale damage and loss of lives, reminds us to ‘Be Prepared, Always!’ Natural disasters can be devastating and can hit when least expected. Governments have little choice but to ensure a state of Infrastructural & Social Resilience.

Financial and Economic Disasters, on the other hand, are cyclical. Every economy is exposed to

such eventualities. Modern day technologies and business solutions can help you manage such cyclical economic pressures much better – resulting in Economic or Operational Resilience.

A Resilient Economy is also an Engaged one. It interacts openly and consistently with its constituents.

Thanks to social media, with tools and web applications such as Facebook, Twitter, and countless other online channels, citizens have little barrier to get engaged. It is almost impossible not to nurture an Inclusive Society. The conversations are no longer limited to the neighborhood coffee corner. The cafes are now online and borderless.

Social Media and the latest advancements in Smart Phones and Smart Devices such a Tablet PCs, have brought citizens within a hairbreadth from their Governments. The question is how quickly are Governments responding? In the majority of cases, citizens would argue “not fast enough”...

Embracing Social Media entails a completely new way of thinking.. and working. Take Twitter for example. Today there are 200 Million Twitter Accounts globally. Less than a year ago, there were only 80 Million. Every day, there are 460,000 new Twitter accounts being created. About 1 Billion Tweets are sent every week. Imagine the diverse conversations... It is a whole new world evolving right before our eyes. Add to this, the 700 Million active Facebook accounts!

Citizens, powered by Social Media, no longer tolerate inefficiencies silently. Everything is reported – publicly and instantaneously. From potholes to corruption; traffic jams to overcrowded public



Adaire Fox-Martin

Senior Vice President, Industries and Business Solutions Group, Asia Pacific Japan, SAP.

transportation; and rude counter staff to lethargic application processes, among others.

The Future State is one that cannot afford downtime. Just as how we expect our Bank ATMs to be up and running, spewing money, on demand, at our behest 24X7 – and, by the way, regardless of location.

The Future State – from an efficiencies standpoint is one that hums along in perfect harmony regardless of circumstances – political change, economic disasters, or natural calamities. The management of such economic and social impacts, or even natural devastation, needs to be ‘built-in’!

It is the responsibility of technologists, such as SAP, to invest heavily into R&D that produces world-class information systems and solutions. These powerful engines of efficiencies enable Run Better Governments to Collaborate Better; Decide Better; Adapt Better; and Operate Better.

The end-product of a Run Better Government is the unlocking of unprecedented Public Value.



THE FUTURE STATE: **RESILIENT,** **SUSTAINABLE** AND **INCLUSIVE**

Governments across the world are feeling an unprecedented squeeze. On the one side, citizens are demanding greater transparency and convenience, while on the other, global disruptions in the environment, the economy and the geopolitical arena have made it even harder to serve citizen needs smoothly and efficiently.

Managing the state of the future will, then, be an exercise in being able to finely balance

the parameters of efficiency and accountability against rapidly changing mandates as technology and citizen expectations mature.

A lot of this ability to balance will depend on how thoughtfully and thoroughly resilience is built into its system such that crises cause minimal damage, on how sound its fiscal, social and environmental policies are, and how it best manages to leverage the pool of talent within its citizenry. What are some of the best ways to do this, and how

can a well-run government run even better?

RUNNING GOVERNMENT BETTER

.....

The Centre for Technology in Government (CTG), University at Albany, State University of New York, US, aims to find out exactly that. Its aim is “to foster public sector innovation, enhance capability, generate public value, and support good governance,” and its Deputy

Director, Dr Anthony Cresswell, firmly believes that governments are responsible for some of the best - but also some of the worst - aspects of their citizens' lives.

The CTG framework identifies six value types expressed in terms of the impact government IT can have on the interests of public stakeholders:

- Financial – impacts on current or anticipated income, asset values, liabilities, entitlements, and other aspects of wealth or risks to any of the above.
- Political – impacts on personal or corporate influence on government actions or policy, role in political affairs, or influence in political parties or prospects for current or future public office.
- Social – impacts on family or community relationships, social mobility, status, and identity.
- Strategic – impacts on economic or political advantage or opportunities, goals, resources for innovation or planning.
- Ideological – impacts on beliefs, moral or ethical commitments, alignment of government actions or policies or social outcomes with beliefs, or moral or ethical positions.
- Stewardship – impacts on the public's view of government officials as faithful stewards or guardians.



Dr. Anthony Cresswell

*Centre for Technology in Government,
University at Albany*

“Knowledge is king, more so in this age of social media and mobility, where the Internet lives in one’s pocket. A government needs to be in the know. Ignorance can make a government, very quickly, irrelevant,” remarks Adaire Fox - Martin, Senior Vice President, Industry Business Solutions, Asia Pacific Japan at SAP.

The United States has consistently ranked among the top three in several independent e-government studies recently, and in Waseda University’s rankings released in 2011, it came a close second behind Singapore. Two years ago, however, it ranked first, and the two countries have been - along with Sweden and Korea - battling for the top rank on the e-government list.

Dr Cresswell suggests that while the best US states and large parts of the Federal government are well prepared for the future, the



Adaire Fox-Martin

*Senior Vice President, Industry Business
Solutions, SAP Asia Pacific Japan*

excellence in e-government is not consistent across all aspects of the US public sector and that Singapore is a better example of national planning and investment.

In Singapore, “the government agencies continue to seek improvements,” he opines. He also gives the example of Korea, which has “made great investments in infrastructure and access for the public and are moving forward with improvements in the operations of government.” In Korea, government agencies develop applications for internal use and for export, producing revenue and saving other governments the development costs.

THE EVOLUTION OF LOCAL GOVERNMENT

Birmingham City Council (BCC),



Glyn Evans

Director of Business Solutions & IT with Birmingham City Council

the largest local authority area in the United Kingdom, has an annual budget of £2.7 billion and one million customers. In 2007, it implemented a ten-year, £475 million IT transformation programme.

At the helm was Glyn Evans, appointed in 2003, as Director of Business Solutions & IT with BCC, with the remit to drive forward a business transformation programme across the Council.

He eventually took on the role of Director of Transformation to ensure business transformation is adopted, embedded and implemented across the Council.

The transformation programmes included the following principles:

- Customer First (improve service delivery)
- Efficiency (improve back office efficiency)
- Excellence in People Management (improve staff management)

- Working for the Future (make best use of property and assets)
- Information Management
- Housing & Environment
- Adult & Childrens Social Services

Three corporate targets were set: the council wanted to be in the ranks of top 10 per cent of local governments in the UK in terms of performance, top 15 per cent in the area of productivity and top 10 per cent when it came to staff satisfaction.

“What matters is that the goals have to be consistent and measurable,” he elaborates. “You always need clear targets for everything you do such that the people know what they are trying to achieve.”

With some flexibility, the targets were built into full business cases. A joint venture, called “Service Birmingham”, was established by BCC and Capita, an outsourcing firm in the UK. The joint venture, of which the BCC owns 30 per cent, is a shared service capability using comprehensive platform and support from SAP, in the areas of back office finance, procurement, HR & payroll, front office call centre, IT systems, and several other integrated administrative operations.

According to Fox-Martin, a key achievement for BCC centred around the fact that Corporate Services Transformation (CST) was successfully implemented. It involved a change to a shared service delivery model and

using SAP’s software suite to support the integration of the council’s financial, procurement, and operational performance management processes.

CST is on track to achieve £860 million in benefits over 10 years, of which £518 million will be cashable.

A SHOCK-PROOF AND RESILIENT PUBLIC SECTOR

“Resilience does not depend on complete knowledge or being able to accurately anticipate all disasters or disruptions. The trick is not to avoid all surprises, which is impossible, but to expect to be surprised and to prepare for rapid adaptation to the unexpected. Adaptive management and governance appear to be crucial,” argues Dr Cresswell.

He gives the example of New York City’s response to the 9-11 attacks on New York City. The government needed much IT equipment to set up a new emergency management centre from scratch when the previous one was destroyed in the attack. The City government asked vendors to provide large amounts of new equipment, and they did, without formal tendering or normal procurement processes.

This stands in direct contrast to the response of Haiti during the 2010 earthquake. The public sector - already groaning under the strain of every-day

operations - completely broke down, and without aid from neighbouring countries and Non-Governmental Organisations (NGOs), the death toll would have far exceeded the actual numbers. Immediately after the earthquake, several NGOs and private companies involved in mapping, telecommunications and some specialised in relief efforts shared and opened up data that they had collected, when the government proved inadequate in its response.

“Governance adapted to the needs of the moment. Disaster training and preparedness should involve as much attention to creating new ways to respond as to practicing and reinforcing existing methods,” Dr Cresswell comments. Fox-Martin agrees, with the observation that there are times when real-time information is difficult to procure. She notes that in such instances, agencies can only depend on historical data, and predictive analytics can thus become central to any effort in building resilience.

According to Dr Cresswell, one way of being prepared is for the government to preemptively build a connection with the innovative aspects of its population, so that IT development for the government is no longer confined within its budgetary and geographical boundaries.

“The UK’s Directgov | Innovate is a programme encouraging creation of apps to link to or

enhance government services. The same thing has been tried in the US cities and Australia has created an toolkit to assist public servants and agencies innovate,” he explains.

SUSTAINABILITY AND LONG-TERM PLANNING

Dr Cresswell lists four issues that he believes will become increasingly important for governments to consider in the future:

1. *Balancing control of information and technology with individual rights and privacy.* The events of the “Arab Spring” and in London’s riots show how important grass roots information flows can be for mobilising actions. Every government needs to balance democratic values and civil rights against needs for security and social order. Is it good to have or use an “Internet kill switch”? These issues will only grow as technology continues to evolve.

2. *“Big data”.* New methods and capacities are presenting potentially powerful tools for processing and analysing very large data flows and data stores. The potential to monitor and assess massive financial transactions, such as in the stock market, in real time, will give new powers. Potential for increased controls and efficiency in operations will grow exponentially, as will possible invasions of privacy - and

with them, opportunities for repressive actions.

3. *Cybercrime and cyberwarfare.* The risks and potential catastrophic disruptions resulting from cyber attacks will only get worse and the incentives for such hostile acts are not likely to diminish. The future state will need much better defences--in the form of state-based governance and legal systems--and much improved multinational collaboration mechanisms for protection and response.

4. *Technology dependence.* As governments become more and more dependent on IT, they become more and more dependent on the IT industry. That industry has many very large and powerful players—with attendant threats to government sovereignty or constraints on action (for example Google’s fight with the Chinese government). What’s good for a private company may not always be good for any particular country.

In 2008, South Korean President Lee Myung-bak proclaimed Low Carbon, Green Growth as Korea’s new national vision. In a move to bring “the green revolution into everyday life,” Korea is betting on not only improving the life of its citizens through making the country a better environment to live in, but also creating jobs, fueling technological innovation, and saving money in healthcare costs. This year, the country invested US\$7.18 billion in the creation of a “smart grid”, as an

effort to curb Carbon Dioxide emissions and improve the efficiency of its electricity market. This is in addition to a US\$10 billion investment in Green-IT related projects spread out over five years, set up in 2009.

Dr Cresswell affirms that “lack of attention to sustainability is an extremely short-sighted policy position. Not only is it important for governments to improve their own performance with respect to sustainability, it is important for them to lead innovation and public opinion in their countries. Governments should be models of efficiency and environmental stewardship, and can be with enlightened leadership.”

**INCLUSIVENESS:
RALLYING THE CITIZENRY**

On the 17th of September, nearly 2,000 protesters gathered on Wall Street in New York in a gathering called “Occupy Wall Street”- an effort to protest the domination of the banking industry on the politics of and the governmental policies in America. It is the very first such organised mass protest to have arisen directly out of social media connections and information dissemination: it has no leader, no central propelling cause, and no definite planned outcome. It was inspired by the “Arab Spring” revolutions earlier in the year, in which Twitter, the social media networking framework, played a major role.

As the inner workings of the state are slowly stripped of their opacity, governments that do not respond

to calls for greater transparency may not only become obsolete, but also lose their power to rule; transparency in government has, with wikileaks and social media being ubiquitous, become a political issue.

How best, then, can governments ride the wave of social grass-roots organisation that seems impossible to resist?

“Greater openness in government is a trend that will only grow in importance, short of some global catastrophe,” remarks Dr Cresswell. “Governments that resist, at least in the developed or middle range of wealthy countries, will not survive.”

“In the wealthier countries, more openness will not necessarily lead to greater efficiencies in the short run, since it can have a disruptive effect on business-as-usual and requires investment to implement. But I believe that in the longer run increased openness allows governance and decision making to improve in important ways.”

As a leader within the Birmingham City Council, Evans believes in evolving rules of engagement as traditional roles and dependencies catch up with the times.

“Every month I go out and spend half a day with front-line staff allowing them to challenge me - I encourage that. I might have twenty people in one of those sessions. It is not the point of covering all the issue people are raising--people can see others are asking questions they would ask. This is a two way process. I meet the trade unions once a month

to talk through transformation. They agree with the objective but not necessarily with every single detail,” he recounts.

“People often talk about government having different objectives, called public outcomes, rather than achieving efficiency and cost savings,” comments Evans. “But they don’t contradict each other – the more efficient you are, the easier you can achieve those public outcomes.”

A VISION OF THE FUTURE

“I would argue that almost everything that a Government does results in outcomes that influence its economic and social health,” says Fox-Martin. “Take a healthcare campaign; a healthy society drives a productive nation. And productivity is the foundation of GDP. From rural development to healthcare; education to the aging society; and public security to public administration – there are abundant opportunities for Governments to unlock public value everywhere.”

On this future state, Dr Cresswell remains firmly optimistic about open governments being able “to improve themselves and to improve the lives of citizens, even when the opposite seems to dominate the news.” He quotes Martin Luther King Jr, who declared in one of his prophetic speeches that the arc of history is long, but it bends towards justice.

“We should be working to ensure the future state follows that arc. But to do it we must bring fresh eyes and ideas,” Dr Cresswell says.<



MAKING AUCKLAND A GREAT PLACE TO LIVE

The Auckland Regional Council Group manages the region's growth and development, its air and water quality, regional parks, public transport, the coastal and marine environment, and natural and cultural heritage sites. "The ARC Group has a big role to play in making Auckland a sustainable, liveable, and prosperous region," says John Holley, general manager for information and communication technology (ICT) for the ARC Group. "We have quite a diverse

range of things to look after, and we must manage Auckland's development such that it meets our present needs without closing off options for future generations."

The group has eight departments, each made up of groups that deliver on the activities for which the department is responsible. The departments include the chief executive's office, corporate services, human resources, parks, policy and planning, programmes and partnerships, regulatory

services, and transport and urban development. Additionally, the ARC Group has two subsidiaries under its care: the Auckland Regional Transport Authority (ARTA) and Auckland Regional Holdings (ARH). These various divisions resulted in a huge amount of data residing in more than 200 disparate databases, making data management a difficult task. It was also challenging for managers in each department to generate the reports they needed to ensure smooth-running operations.

“We have been struggling with reporting for quite a while,” remarks Holley. “I needed a single reporting tool that can generate reports as and when our managers need them, via just one framework that is capable of extracting data from all the different data sources that we own. I also wanted a single solution that works across any system that we own now and in the future.” To address this, the ARC Group implemented SAP® BusinessObjects™ software to generate reports that would give them a single version of the truth.

ENHANCE ABILITY TO GENERATE REPORTS

Prior to implementing the SAP application, the group was using SAP Crystal Reports® software, which is suitable for financial reporting, says Holley. The departments generate a wide variety of reports such as marketing reports, performance reports, staff time-sheet reports, analysis on park bookings, and general ledgers. Hence, the ARC Group’s diverse operational requirements necessitated a versatile solution that is user-

friendly, allowing business managers from any department to immediately generate reports without having to consult technical staff for help.

The large number of disparate data sources caused problems for Holley’s team. “With so many different databases scattered across the organisation, we had a lot of difficulty linking information and extracting it. Every time a manager needed an ad hoc report, we had a hard time drawing relevant data to generate that report. Sometimes, we had to engage an external expert with the right technical expertise to help draw the report,” he adds. “As a result, it took a couple of days to complete a report – or worse, it was impossible.” Indeed, depending on the complexity of the report, in the past it could take the ICT team two to five days to generate a report.

SUPERB SYNERGY

When Holley saw a demonstration of SAP BusinessObjects software in June 2008, he immediately knew that the SAP software would be an excellent fit with the group’s

business and IT environment. “There is a lot of synergy as we are already using the SAP ERP application, and we wanted to fully leverage our investment in that area. What’s more, SAP BusinessObjects software has an impressive set of tools that lets you dissect and analyse data quickly and easily, regardless of whether you are a technical staff or business staff,” says Holley.

“SAP BusinessObjects software has a lot of good features and tools. Best of all, it is compatible with different systems we have in our IT environment,” he adds. And although Holley is aware of alternative solutions in the market, he feels that they do not even come close to what the SAP BusinessObjects tool can offer.

The ARC Group implemented the SAP BusinessObjects solution in July 2008, first for its Finance and ICT teams, and completed the rollout in March 2009. The group also installed the SAP software to ARTA in August 2009. The group’s data is now organised on three main databases, and although there are still multiple discrete data sources behind the main databases, the SAP

BusinessObjects solution now makes it easier to access data residing across the organisation.

“Business managers do not need to know where their data resides. All they want to know are key performance indicators such as how much money is owed to us and how many hours their staff have put in and in which areas. With the SAP BusinessObjects solution in place, they can now easily extract simple reports through a dashboard; and even without technical know-how, they can drill down and obtain a microview of their operations using tools available in the SAP software,” explains Holley. Previously, for instance, a staff time-sheet report took about two days to generate. This task now takes only about three hours to complete.

MAKING ACCURATE BUSINESS DECISIONS

By making it easier to generate reports, the SAP BusinessObjects software has enhanced the ARC Group’s ability to analyse its business performance across all departments, which in turn

improves the decision making process. “It was difficult for staff to make decisions in the past,” says Holley. As an example, he explains that in Auckland, transport companies are owned and managed by private operators who receive subsidies from the group. In order for ARTA to decide how much funding should be given to each operator, managers need reports on commuters’ adoption rate of a certain bus route and the impact of marketing on commuters’ behavior. To ensure that commuters’ needs are addressed, managers also need reports that analyse traffic flow, which helps them decide whether to increase the frequency of buses traveling certain routes.

They also need to conduct physical space analyses to determine if bus stops along busier routes are capable of accommodating additional capacity.

“In the past, it was nearly impossible or extremely time consuming for managers in ARTA to draw reports that analyse the performance of our public transport systems and transport infrastructure projects. But we can now do so easily with SAP

software. Managers can also make ad hoc reports as and when business demand arises,” Holley adds.

ENHANCED DECISION MAKING

By making the process of generating relevant and time-critical business reports straightforward and simple for the staff, Holley and his team have created an analytical business environment that is optimised for decision making. “Our staff did not do a lot of reporting in the past, as it was either too time consuming or they did not have the resources to create the reports they needed in a timely fashion. SAP BusinessObjects software changed all that,” says Holley.

“What I really like about working with SAP is the access to great tool sets and its support environment. I like their road map for the software, and the software itself enables us to maximise the value of our data and drive optimal value from our SAP software environment.” <



MOBILE GOVERNMENT: ANYTIME, ANYWHERE

Reduce 5 kgs in 2 weeks and lose up to 4 cms in 15 days. Join Golden Gym today and avail a discount of 20%", so goes one of the many SMSes that a SIM typically receives every day in

India. These SMSes sell a wide range of products and services - weight loss to spas, doctors, real estate, coaching centres, etc. - reflecting the penetration of mobile phones even in a developing country. Most

importantly, messages delivered on mobile phones are delivered instantaneously as the mobile travels with the owner. This 'anytime, anywhere' availability feature of mobile devices can be leveraged by governments

to make public information and citizen services available 24*7.

Kip Cole, Vice-President, Head of Enterprise Mobility Solutions, SAP, Asia-Pacific, elaborates, “As mobile penetration in developed countries nears ubiquity and registers exponential growth in developing countries; government services can now be extended directly to citizens wherever they may be. Whilst the first step might be to deliver existing services directly to citizens (tax payments, forms and applications and so on), it’s the opportunity for a new, more engaged real-time relationship with citizens that shows much promise. For example, it is possible to deliver crowd-sourced traffic reports; to allow citizens to report graffiti locations or where roads need repair. Governments can use mobile technology to deliver civil defence services, for example tsunami warnings or terrorism alerts.”

“These new technologies and approaches such as **mobile technologies and use of**

social media provide a rich opportunity to the governments to innovative the way the public sector works internally and interacts with citizens and businesses and provide services which respond to their needs,” says Barbara Ubaldi, Head of the e-Government Unit at OECD (Organisation for Economic Co-operation and Development).



Mobile phones allow for greater citizen participation by facilitating an easy, two-way communication between the citizens and the government

M-government is an extension of e-government to mobile platforms and is gaining currency as the cost involved in buying and maintaining a mobile device is way lower than a computer or laptop. Besides this, mobile phones allow for

greater citizen participation by facilitating an easy, two-way communication between the citizens and the government. Besides these, it allows for multiple access channels for services (SMS, GPRS, GPS, etc.). Says Cole, “m-government presents far-reaching and transformative opportunities for creating a greater level of engagement between governments and people. Where the general satisfaction with the government appears to be under pressure, the positive aspects of service delivery and social applications can make it more relevant and engaged.”

Mobile technology has enabled governments across the world become transparent, accountable and efficient, thus resulting in greater citizen satisfaction. Mobile services are being used to enhance the quality of healthcare, education, security, governance and the quality of life in general.

India’s Indira Gandhi National Open University (IGNOU) imparts student courses on



Kip Cole

Vice-President, Head of Enterprise Mobility Solutions, SAP, Asia-Pacific

public health, art, music and various other subjects through mobile phones. Various public banks have started mobile banking facility in the country. Mobile phones are also being used to monitor the work of various public departments. Bangladesh government sends text messages to warn people of natural disasters, including floods and cyclones. The Singapore government recently launched mGov@SG, a one-stop government mobile

site congregating more than 40 mobile government services, for customers who want to transact with the government while on the move. It is a similar story in the US, UK and Australia. While various similar initiatives are being undertaken across the Asia Pacific region. Mobile government seems poised to be the focus area of governments for some time to come.

No transformative technology comes without risks and challenges. Clarity and strict privacy policies are very important and hence security infrastructure and management are important for its success. "One of the challenges in moving to a mobile environment is balancing the required robustness of the enterprise applications with the 'creative chaos' that is the mobile device world. Hence making technology choices which limit flexibility, or which don't address the scalability, security, performance and reliability elements may face future challenges that

are difficult to overcome. Secondly, this is a very fast moving and innovative part of the information technology industry. Building a service delivery strategy that is flexible and responsive will be important in order to capture the innovation benefit that mobility brings," says Cole. As a lot of government data on citizens is sensitive (eg. tax-related or health related) all applications, especially the end points of access such as the mobile phone need to be secured.

The issue of security is all the more important as mobile devices are relatively easy to tamper with as its networks use public airwaves. Add to that the fact that many countries have not yet drawn an m-government strategy detailing legislation and code of conduct for citizens as well as the governments. "The effective capacity of the governments to actually reap the benefits of mobile technology will also be their capacity to effectively deal with the challenges that come along the

adoption of these technologies such as being strategic in their approach, implementing the required organisational and structural changes, need to develop new skills and train the public sector workforce as well as their societies. This is extremely important to avoid the creation of new forums of digital exclusion as a result of adoption of these new technologies.

“Common challenges include the ability of fully comprehending the needs of citizens and being responsive in providing services besides privacy and security issues,” opines Ubaldi, adding that it is important for the governments which have progressively moved to e-government services to also accommodate the requests of citizens who still prefer the personal contact with the public workforce to access public information and services.

Addressing issues of interoperability and compatibility is yet another challenge as

some services are tied to specific operating systems, devices and even departments. Says Cole, “technology trends suggest that for governments (and public-access applications in general), a strategy based upon HTML 5, CSS 3 and Javascript will deliver the best balance between features and cross-platform compatibility.”

When it comes to m-government, developing countries have an advantage over developed countries in many respects.

Mobile penetration in China and India, for example, is among the highest in the world, ensuring wide-reaching service delivery. Cole explains, “there is also a ‘generation skipping’ advantage for developing countries. They have the chance to build next-generation service delivery platforms focused around mobility without having to manage a transition from existing delivery platforms. Hence overall their costs could be lower, their time to delivery shorter and the population reach wider.”

For example, when Singapore decided to implement an m-gov strategy as part of the Integrated Government 2010 e-government masterplan for 2005-10, it meant taking into account all e-government services that were earlier being delivered over the Internet. On the other hand, m-governance initiatives in India are primarily aimed at the rural population which doesn’t have access to e-governance schemes due to low penetration of the Internet and Broadband.



Mobile government seems poised to be the focus area of governments for some time to come.

It is evident that mobile government will shape the future of governance and governments need to attune themselves to new trends in the segment, both technologically and culturally to effect meaningful changes and better citizen satisfaction.<



DELIVERING MORE FOR LESS

FutureGov discovers how governments can optimise their performance even as they grapple with a multitude of challenges in an uncertain world.

“In the 21st century, government organisations will increasingly face novel and deeply uncertain challenges. In areas ranging from defeating terrorism, to halting new diseases, to spreading democracy and development, to protecting

the environment, government will face problems like those of the third age. New computer-based capabilities offer these organisations the ability to describe ambiguous information concretely, to consider multiple views of the future simultaneously, and to articulate strategies

likely to yield favourable outcomes despite deep uncertainty.” (High-Performance Government, edited by Robert Klitgaard and Paul C Light)

Given the multitude of challenges being faced by them on all fronts, public sector organisations need to work hard

to create public value and, in turn, earn public trust. Their prime focus has to be on effective delivery of public services while streamlining costs.

CREATING PUBLIC VALUE

“Public sector organisations are under constant pressure to do more with less. With budgets strained, resources stretched thin, and a growing emphasis on accountability, organisations need to deliver maximum public value while demonstrating tangible results for all money spent,” explains Paul Marriot, Vice President, Platform & Technology, SAP Asia Pacific Japan.

The key for many central, regional, and local agencies and governments is to gain insight into the performance, costs, and risks inherent in current processes and projects. “The best way of doing this is to have a strong business intelligence and performance management system. With tools such as these,

government organisations can develop a better understanding of how funds can be put to work for optimal public benefit. Lack of insight fuels inefficiency,” adds Marriot.

For instance, large amounts of data are being created as a result of the Government of India’s Unique Identification (UID) project. The project aims at providing a unique number to all Indians. The government is working towards creating a database of residents containing data in biometrics. Once the data is created, it will need to be analysed. Business intelligence and analytics would play a crucial role in this space.

Most public sector organisations rely on sophisticated IT systems to support key processes such as social services, tax and revenue management, and public security. While these systems may automate and streamline these processes, they typically do not generate

the cost, risk, and performance data that is needed to maximise the value of a given programme or initiative.



With budgets strained, resources stretched thin, and a growing emphasis on accountability, organisations need to deliver maximum public value while demonstrating tangible results for all money spent

This is particularly evident in areas such as performance budgeting and cost management. Often, government agencies lack the insights needed to fund programmes that are most successful. Viable projects may wither while ineffective programmes receive unwarranted support. Agencies must embrace technologies that



Paul Marriot

*Vice President, Platform & Technology,
SAP Asia Pacific Japan*

help them maximise the impact of their budget by funding those programmes that demonstrate the highest potential or best results. Such solutions allow them to define and monitor strategic goals and outcomes, and then make informed decisions based on an analysis of programme costs and outcomes. By integrating budget, cost, and performance data, they can uncover opportunities to allocate money where it will do the most good. The application also helps to manage and measure organisational plans, enabling proactive (rather than reactive) decision making.

Law enforcement is another

area where innovative solutions are required to help improve operational performance. Facing an ever-growing array of threats and crimes, meeting these challenges depends on optimising the use of assets and resources. Agencies need to embrace solutions that enable them improve on the operational performance of enforcement organisations.

“Take for instance, software that helps them predict – and track – crime and threats would allow law enforcement agencies to allocate resources to the most beneficial public safety initiatives,” notes Marriot.



Without proper analytics and resource evaluation tools, many public sector organisations struggle to reduce costs or enhance results-based programmes.

Applications should help in accessing, indentifying and sharing crime and threat data across multiple jurisdictions.

Determination of crime patterns should be possible by correlating

information from varied sources. There should also be a method to measure and report performance via dashboards, key performance indicators, and reports.

A case in point is the new communication devices being introduced by Malaysia’s police department. The Royal Malaysian Police (RMP) is introducing new digital communication systems such as the Mobile Card Acceptance Device (MCAD), long-range digital radios, computer-based police reporting system, and police report online checking system. MCAD allows police patrol officers to check personal details, vehicle data or past criminal records of suspicious characters they detain and will no longer have to contact headquarters for information.

According to Datuk Zulkifi Abdullah, Director of Federal Logistics Department, RMP, the new system has the ability to combine data and voice and lets police uses SMS communication. The expansion promises to improve police communications to reduce crime rates in the country.

Performance and risk management is another critical area. Without proper

analytics and resource evaluation tools, many public sector organisations struggle to reduce costs or enhance results-based programmes.

“We need structures that align with functions. **We need leaders who are educated and trained to think about both strategy and implementation, with integrity.**

And we need incentives based on performance,” explains Robert Klitgaard. Klitgaard has been an advisor to many governments on economic strategy and institutional reform and is co-author of High-Performance Government.

Agencies need to adopt solutions that help them manage cost-containment initiatives and develop results-based programmes. Applications that allow them to direct funds to effective programmes that support key strategic objectives and desired outcomes.

Comprehensive functionality also helps to consolidate disparate data and create a single version of the truth. Analytics should be used to deliver actionable insights to stakeholders and partners. Agencies should match immediate tasks with long-term goals and leverage

process automation to drive efficiency and consistency across the organisation. True, multidimensional value of expenditures should be measured.

STREAMLINING OPERATIONS WITH A FOCUS ON SPEED, AGILITY AND EFFICIENCY

With every passing day, the pace of business is accelerating. Social media, for instance, has radicalised the way news travels around the world – in many cases, this happens real-time. Tectonic shifts in the global economy combined with rapid technology adoption are forcing decision makers to contend with a new global marketplace fraught with uncertainty and constant change. To be successful under these new market dynamics, organisations must constantly renew their strategies and processes at lightning speed — allowing them to leverage intelligence instantly and take immediate action. At the same time, they must make sure their decisions are informed by proper data and analysis.

“Streamlining operations is very important. The hard part is understanding the systems

and customers/clients/citizens well enough to know what can be cut, reduced, even eliminated without ruining the product/ service/experience,” adds Klitgaard.

Government agencies, given increasing pressures to deliver world-class services, anywhere, anytime and on any device, have little choice but to continuously reinvent themselves. **“Mobility and In-Memory technologies are two approaches. Mobility in public sector allows agencies to safely deliver fast, convenient, and collaborative services,”** says Marriot. This can be done in areas such as citizen services, social services, public security, and public administration.

In-Memory Computing enables agencies to deliver real-time services and support to citizens through innovative government in areas such as human resources and services, operations and public security.

By incorporating a host of innovative solutions such as the ones outlines above, government agencies can deliver more for less, achieving the critical task of delivering public value while streamlining costs at the same time.<



TAX AND REVENUE MANAGEMENT: A GOVERNMENT'S LIFEBLOOD

Ancient Egypt, Greece and Rome were amongst the first societies to levy taxes on goods and citizens. This practice continues to this day, albeit somewhat

differently. IT has provided the opportunities for governments to remodel the entire process of tax collection over the last decade. It is, however, a continuously evolving process and governments the world

over need to constantly upgrade their tax systems to optimise their revenue workflows.

Australia's complicated tax laws previously forced a majority of its population to employ an

accountant to assist them in preparing their annual income tax return. The Australian government recently decided to make its laws simpler and proposed the possibility of creating automatically generated income tax returns for individuals. A recent media release by the Australian Taxation Office (ATO) said, “Only five weeks into tax time, over one million people have already chosen to lodge their tax return online using the ATO’s free tax preparation and lodgement service, e-tax.” It further said its pre-filing service is extremely popular.

So, what makes the governments spend money on revamping their tax collection mechanisms?

“With the current economic situation, introducing new taxes or raising tax rates is not a realistic option. **The focus, therefore, is on making sure people pay their taxes.** It is certainly a trend all tax agencies are embarking on. They need

to get their foundation right, meaning they have to introduce an integrated tax system creating accurate information to be used during compliance activities. This will resolve the underlying issue of lack of data governance and transparency,” says Markus Werling, Vice-President, Solution Management Public Services, SAP.

In a bid to improve taxpayer services, the Philippines tax department is planning to move all its business processes online. Bureau of Internal Revenue (BIR) Deputy Commissioner Kim Jacinto Henares says the agency wants to make it smooth for those who want to register as taxpayers, and prevent identity fraud, by creating a database of biometric identities of each such individual. She said that this makes it essential to clean the department’s database in order to prevent tax evasion. Henares plans to coordinate with other government agencies that already have such databases and procure the same for use by BIR.

Having a clean and comprehensive database, however, is not enough. It is important to make best use of data collected by the agencies over time, relate it to data from other agencies (residential data, business licenses, property information), and use predictive capabilities to assess, score and determine the right strategy to collect the taxes.



With the current economic situation, introducing new taxes or raising tax rates is not a realistic option

Explains Werling, “**e-filing makes it easy for taxpayers who want to comply to file tax returns and pay their taxes.** This drives voluntary compliance quite significantly.” He adds that a multi-channel access for taxpayers, providing access over the phone, e-filing as well



Markus Werling

*Vice-President, Solution Management
Public Services, SAP*

as paper-based processes such as the SAP Tax and Revenue Management solution ensures better user experience. And this translates into better compliance and willingness to pay taxes, thus generating more revenue for the coffers at the minimum possible expenditure.

Mobile and Social Media will add to this in the very near future. They will be another channel for taxpayer interaction replacing other channels such as internet,

call center or walk in. Social media is increasingly becoming popular and they are a very promising prospective channel for the governments to interact with taxpayers in a structured and very personal way. Some tax agencies have tested the water and seen good results.

Werling talks about a State tax agency having introduced Live Chat capabilities as an additional channel for taxpayers to interact with the agency. He says this channel received a lot of attention. As the service was being provided by the existing call centre Staff, there was no huge investment required to start this offering.

Korea's National Tax Service has optimised its mobile phone application <http://m.nts.go.kr> for smartphones. The NTS Twitter account provides NTS news, recent tax information and collects customers' comments. The year-end tax settlement app is also available on mobile devices along with tips on how

to compute as well as save tax. It has Global Positioning System (GPS) built into the software to help locate local tax offices. Besides this, the NTS also sends SMS messages to taxpayers to notify tax arrears, status of complaints and other information regarding tax filing.

The Philippines' BIR, which started its online services in 2001, is now a 'virtual community' which is now an online portal with a search facility, capability for single sign-on to all web-based applications, direct access to content-related resources and customisation of the views of users within the portal.

Given the fact that 90 per cent of the world population has access to mobile networks, mobile applications are increasingly likely to be the next buzz word in the world of tax services. It can also address concerns regarding countries with lower Internet penetration. Add to that the fact that the initial investment

is not very high for introducing mobile applications and Return on Investment (RoI) is quick and substantial. Werling cites an example: “one tax authority offered functionality on mobile devices to look up the status of tax refunds. This app was downloaded nearly 250,000 times within two months. The development cost for the application was a mere USD 50,000.”

Talking of RoI, BIR's Deputy Commissioner, Information System Group, Lilia C. Guillermo says mammoth restructuring projects could not have been undertaken earlier as bandwidth was very expensive. Increasing penetration of the Internet and decreasing maintenance and operations cost of IT has made it possible for BIR to connect 20 regional offices and 124 district offices to one central database as well as take up several other overhauling initiatives. There is no doubt that **IT has made several projects economically viable by increasing the output of the**

labour force of tax departments across the globe, she adds.

IT has also helped several tax agencies revised their taxpayer segmentation which in the past was often based on large vs. small tax payers or segmentation by tax type. Nowadays, segmentation by compliance is receiving more attention, i.e. tax agencies are dealing differently with taxpayers based on whether or not are they willing to be compliant. So there is a clear relationship between making it easy for taxpayers to be compliant and the usage of multi-channel access, educational programs and better citizen services.

Yet another clear information technology-driven trend in the taxation domain is towards using analytical tools such as predictive modeling to detect and prevent fraud. This is facilitated by modern technology where data can be turned into useful information in seconds instead of going through

a lengthy data transformation and loading process. The traditional way of securing citizens' data was to lock it away and restrict access. Werling says this meant high maintenance costs and is, therefore, not a viable option. He adds that the increasing penetration of the Internet, mobile devices and social media warrant that data must be accessible and exchangeable in a secure and auditable manner.

Comprehensive authorisations and data access concepts embedded in the software solution are the key to handling data privacy and security issues. Clearly laid out data management processes supported by procedural and organizational measures are mandatory to ensure data privacy.

Taxes are the lifeblood of a government and IT is helping governments manage it better so that it helps deliver better infrastructure for citizens and businesses, and improving user experience and services. <



TRACKING KPIs ACROSS THE HEALTHCARE ENTERPRISE

Based in St. Louis, Missouri, Sisters of Mercy Health System (Mercy) is the ninth largest Catholic healthcare system in the United States. Committed to making a significant impact on the health and well-being of the communities it serves, the healthcare provider covers a

sevenstate area that includes Arkansas, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, and Texas. Mercy operations include 18 acute care hospitals, providing more than 4,000 licensed beds; two heart hospitals; a managed care subsidiary (Mercy Health Plans); physician practices; outpatient care facilities;

home health programs; skilled nursing services; and long-term care facilities.

THE NEED FOR PERFORMANCE MANAGEMENT AND REPORTING STANDARDS

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With such breadth and diversity

of operations, Mercy places significant emphasis on managing information across the enterprise in a structured and standardised manner. Fred Ford, senior vice president at Sisters of Mercy Health System, elaborates on some of the challenges his organisation faces. He says, “While Mercy has been making major IT improvements for a number of years, the lack of enterprise standards for information management was putting us at a competitive disadvantage. We had major delays with report delivery, and the investment required to write and embed custom reports in each of our primary applications was a challenge.”

To address this situation, Mercy made the decision to implement an enterprise wide business intelligence (BI) solution with a single overarching reporting structure. Additionally, the organisation developed a carefully crafted set of key performance indicators (KPIs). Using KPIs, management can track performance at each successive level of the organisation, and staff can focus on core activities.

For business efficiency, Mercy also required a full performance management tool set. Instead of

making each individual learn how to use every legacy application’s proprietary report generation tools, the organisation required a single Web portal so users could retrieve information via the Internet or intranet. For the many users that need to perform “deep-dive” analyses, the ability to perform robust ad hoc analysis was also important. Additionally, the solution had to allow intuitive access to data from Mercy’s many existing applications – including its clinical management, healthcare information, pharmaceutical management, and financial management applications.

DRIVING THE ENTERPRISE WITH BUSINESS INTELLIGENCE SOLUTIONS

Prior to the project, SAP® BusinessObjects™ solutions were already performing successfully in one of Mercy’s operating units. In November 2006, Mercy investigated potential BI candidates. Because of the organisation’s positive experiences with SAP BusinessObjects solutions, Mercy kept SAP on the short list as a possible BI reporting engine provider. SAP and another key vendor were given the

opportunity to set up sample reporting environments using identical data sets. Ford recalls, “We then solicited participation from a broad subset of users to try out both models over a two-day period, and we prepared a detailed survey for each person to complete to get feedback. The results were that SAP BusinessObjects was the favorite – with users especially liking the interface’s intuitiveness and ease of use – so we formally selected SAP BusinessObjects Enterprise software as the engine to accomplish Mercy’s goals of becoming a true KPI-driven enterprise.”

In addition to SAP BusinessObjects Enterprise software, Mercy’s BI solutions include SAP BusinessObjects Dashboard Builder software, which enables the development of management dashboards, allowing Mercy decision makers at-a-glance views of key performance information. Crystal Reports® software is used for developing an array of reports that business users can access over the Web. Xcelsius® software provides rich visualisation functionality, and SAP BusinessObjects Web Intelligence® software enables Web-based query and analysis. <



UNLOCKING PUBLIC VALUE

Scott Hunter, SAP Asia Value Engineering Senior Vice President, tells Adrienne Valdez how public sector organisations can leverage analytics to maximise resources, decide better, and increase efficiency.

A recent SAP study confirmed that those organisations which adopt best practices in the areas of scope and adoption, process standardisation, technology and customer governance, do

perform better, and do so as their best practice maturity increases," Hunter shares.

"Organisations which decide to invest in a broad scope, process standardisation, technology and strong governance can expect a significant return

on their investment, both in terms of efficiency as well as effectiveness."

As social media continues to grow at a very rapid rate, real time trend analysis capabilities for these social media platforms, like Twitter, will be key to

maximise political and social value. The review of unstructured data can help to determine public sentiment in regards to policies and programs.

While structured data, according to Hunter, will drive the typical dashboards and reports.

The data availability and the analytics appetite will continue to grow. The speed to analyse “Big Data” is critical to have real time / interactive reporting. In-memory technology, a self-service capability that eliminates traditional hard disk-based BI reporting, will become a corner stone to analyse “Big Data.”

Over the years of technology development, analytics has been proven useful in every enterprise, including the public sector.

Be it daily operations, organisational, or business processes, analytics tools help with comprehensive

reporting and dashboards, risk management, operations transparency, logistics, budgeting, documentation, process improvement, and analysis.



The Operational Business Intelligence (OBI) system gives our hospitals unprecedented visibility of bed availability, patient flow and waiting times, in near real-time

“The Operational Business Intelligence (OBI) system gives our hospitals unprecedented visibility of bed availability, patient flow and waiting times, in near real-time. Staff feedback has been overwhelmingly positive,” edifies South Australia Health Project Manager, Eleanor Royle.

South Australia (SA) Health is responsible for the provision of public health care to more than 1.5 million residents.

The department was seeking to replace two underperforming workflow management systems to provide clinical staff and hospital management with better visibility of bed availability, patient flow and waiting times in its emergency departments.

“It was too hard to get through to the data. The reports were complicated, and the hospital staff, working under great pressure, didn’t trust the information and would still pick up the phone,”Royle adds.

Public sector leaders play a crucial role and are cautious of their steps in organisational development. In adopting new technology, leaders keep in mind change management, knowledge creation and transfer,



Scott Hunter
Senior Vice President - Value Engineering
SAP Asia Pacific Japan

simulation and training, and personnel adjustment, apart from relative costs.

“Often times I find public sector leaders want to measure everything. Leaders should measure for improvement, not accounting, focus on what matters, and push past organisational boundaries. Many public sector organisations have never mapped their processes

and determined the correct metrics to measure those processes,” Hunter says.

But, stating various “special” values of analytics to the public sector such as: better impact of IT on society and quality of life, such as medical services, food & shelter, safe streets; bigger role of IT on policies and legislation, including closing the digital divide and economic development; increased focus on key priorities like economic development by freeing resources from transactional work; and improved constituent service by increased responsiveness, analytics proves to be a low risk opportunity worth investing in.

Hunter explains that public sector initiatives should be planned using the following tools:

- a. Comprehensive IT Roadmap – understand the interdependencies of the solution set

- b. Simplify the IT landscape – sunset legacy systems as soon as possible
- c. Comprehensive Data Roadmap – understand where the data resides (database, data warehouse, data mart), how clean is the data, how often is the data refreshed, where does the data come from, etc.
- d. Business process simplification, standardisation, harmonisation, best practices, etc.

SA Health chose a combination of Sybase Adaptive Server Enterprise and Sybase IQ to create a powerful analytic connection between its data source and SAP Business Objects business intelligence solution

“We selected Sybase Adaptive Server Enterprise as our major source of data and Sybase IQ to power our data warehouse. The aggregations and processing of data is very important for clinical systems, and Sybase’s ability to

analyse very large sets of data in real time was one of the main reasons for our decision,” Royle explains.

The OBI system reduces lag in access to performance metrics from weeks to minutes,

connects eight emergency departments, 12 metropolitan public hospitals, 17 regional hospitals and SA Ambulance Services, and provides clinical staff, paramedics and hospital management with unprecedented visibility of bed availability, patient flow and waiting times

SA Health now has the information sourced from OBI available to the public. An external site provides information on bed capacities and waiting times for emergency departments and elective surgery procedures, updated every 30 minutes.

“We are seeing a significant increase in the use of mobile

devices. The public wants to consume data and interact with government via these devices. For example, rather than standing in long lines to pay a fine or renew a driver’s license, younger constituents would rather complete the transaction via a mobile device. Hence, mobility, security and transparency must be considered and planned for,”



Rather than standing in long lines to pay a fine or renew a driver’s license, younger constituents would rather complete the transaction via a mobile device.

Hunter notes as he shares the following pointers for the public sector in leveraging analytics:

- a. Clearly state the vision and goals of the organisation.
- b. Determine the specific Key Performance Indicators that will be measured to drive efficiency and improve performance
- c. Measure what matters. Select a few metrics to focus on initially.
- d. Understand the data model. Determine how clean the data is.
- e. Change management becomes very important – metrics drives behavior – behavior drives value.

“Analytics will move to real time in-memory technology and be consumed via mobile devices. Exception reporting and alert notifications will become the norm and benchmarking will become critical to establish baselines and performance targets,” Hunter comments on the bigger value analytics will offer in the future.<

social network



GOVERNMENTS AND SOCIALISING

The advent of social media has seen governments hopping onto the bandwagon in a bid to further engage citizens. **Xinghui Guo** finds out why APAC governments are doing this and how they manage the communication channels.

Social media can be used by governments to provide greater transparency as well as easier and more timely and convenient access to official information, says Andrea Di Maio, Vice President at Gartner, about the functions of social media in the public sector.

“It can be used to engage citizens and other stakeholders on a number of important topics, ranging from policy-making to addressing emergencies or complementing government services with voluntary resources,” Di Maio explains.

“It can be used to gather the sentiment about certain topics

by performing social analytics or liaising with communities established by citizens on topics they feel strongly about.”



According to Twitter, 35 global head of states use the micro-blogging site as a primary way of communicating with their constituencies.

Social media is an important platform for governments in this time and age. As Raj Munusamy, Director of Marketing, Public

Services, SAP, put it: “If Facebook were a country, it would be the third most populated after China and India.”

Facebook now has more than 750 million active users spending over 700 billion minutes per month with an average Facebook user having 130 friends.

“Facebook is a tool capable of mobilising tens of thousands of people in a matter of days. It gives people the power to share and make the world more open and connected, in a way that government agencies cannot ignore,” states Munusamy.

GOVERNMENT BUY-IN

Luckily for the public sector, governments aren't ignoring the social platform.

According to Twitter, 35 global head of states use the micro-blogging site as a primary way of communicating with their constituencies.

"In the United States," says Twitter's blog, "frequent Tweepers include every cabinet agency, 84 per cent of state governors, and every major candidate for President."

In Singapore, for instance, the Prime Minister has called for the Government to do better in social media, prompting a full-fledged training program on ways to embrace and leverage social media across the Government of Singapore, shares Munusamy.

This is a calling that the Singapore Police Force (SPF) has heeded.

Aside from its extensive engagement effort that includes a YouTube channel, TV programme, a FaceBook page with 160,998 followers, and a Twitter account, SPF is launching an iPhone application this month.

"With the rapid growth of social media, especially in the last 3 to 4 years, SPF has to stay relevant to changing times in reaching out to the young and Internet-savvy audience in our fight against crime," explains Ng Guat



Andrea Di Maio
Vice President at Gartner

Ting, Assistant Commissioner of Police, Director of Public Affairs Department, SPF.

"People now access social media on the go via their mobile phones. This means that the SPF must be able to reach out to the community via multiple channels, including through mobile phones."

Australian government agencies are no strangers to social media too. Parks Victoria—the Victorian statutory authority responsible for parks in the state—set up their media accounts in March this year "after a few months of careful planning", said Jon Garner, Senior Communications Officer - Online, Parks Victoria.

The agency is now on Facebook, Flickr, Twitter and Youtube, even archiving their activities to comply with public record policies.

Earlier this year when major flooding trapped campers in a



Raj Munusamy
Director of Marketing, Public Services, SAP

park, Parks Victoria even used these media to "give immediate and accurate images of what had happened and show that the situation was under control and people safe", shares Garner.



With multiple employees managing the social media accounts how can the public sector present a cohesive image throughout?

STRATEGIES: A MEANS TO AN END?

With multiple employees managing the social media accounts—let's not even go into various ministries and governments yet—how can the public sector present a cohesive image throughout?



Ng Guat Ting

Assistant Commissioner of Police, Director of Public Affairs Department, SPF

“Social media, being a free movement on the web, requires a multi-pronged approach,” says Munusamy. **“On one hand there is a need for a centralised model for the government to better manage the communications process and programmes, but on the other, there is a need for a more liberal approach for agencies to be able to engage their constituents quickly and effectively.”**

“Many governments are already looking into social media but few have a cohesive and effective strategy in place. This is not an easy move but it is necessary.”

Di Maio however cautions that strategies should be developed with a social media policy in place.

“These policies should focus on how to prevent employees



Jon Garner

Senior Communications Officer - Online, Parks Victoria

from taking unnecessary risks to themselves and to their organisations when being on social media, and should determine the relationships with other policies, such as freedom of information, public record, data protection and so forth,” he says.



Governments should find the right blend between social media channels that they can control and social media where they just participate through individual employees’ engagement rather than the government as a whole.

However, **having a social media policy or strategy does not necessarily lead to making effective use of social media,** warns Di Maio.

“I’m skeptical about the need for having them. This would imply that social media is an end in itself, rather than a means. So I would welcome to see social media handled as part of a communication strategy, or as part of an IT strategy, or as part of a strategy to more effectively fight crime or re-employ unemployed people.”

For both SPF and Parks Victoria, both agencies seem to be using these tools as a means—fighting crime and public education for SPF, and inspiring people to visit parks, share experiences and collaborate on park development for Parks Victoria.

As Ng says, “SPF’s approach in social media is to tap into its full potential by exploring possibilities of these platforms to engage the public.”

“The assessment is SPF’s involvement in social media has to go beyond using social media for public communications purposes to one which could galvanise the online community into action to fight crime and generate participation in police-related activities, programmes and schemes.”

FUTURE PLANS

Both SPF and Parks Victoria have interesting social media ideas up its sleeves.

Apart from the iPhone app earlier mentioned, SPF has a vision of community policing being extended to the online world and the agency is looking into hosting e-Townhalls type of dialogue sessions via SPF's Facebook page—similar to what US president, Barack Obama, has been doing with Twitter and Facebook.

SPF is also thinking of hosting live chats with fans so that citizens and residents can freely engage with police officers online.

As for Parks Victoria, Exciting plans in its pipeline include finding ways to segment their main audience, and providing ways to enable people to select which parks to receive updates from, so that the agency can share local photos, stories, videos and events with the people that are most relevant.

"So in addition to our 'main' presence on Facebook and Twitter, we are looking at how people can connect with and follow the individual parks that mean the most to them," says Garner.

'ONLY A CHANNEL'

According to Di Maio, social media is just a channel—a channel to listen and a channel to engage.

"Social media is often considered as an additional channel to reach out to the populace. If one looks at the public affairs or the communication viewpoint, this is absolutely correct. However this is only one, and I would argue a rather marginal use of social media," says Di Maio.

Di Maio thinks that governments should find the right blend between social media channels that they can control and social media where they just participate through individual employees' engagement rather than the government as a whole.

"Governments should reflect better about whether it is better to own a social media presence, or join somebody else's one, Di Maio quips.

"For instance, if a new draft policy is unwelcome by a part of the community, it is very likely that protesters will self-organise in an online community to debate this. **It can be more effective for government to monitor and join such external community to respond, rather than creating its own.**"

"They are more likely to be able to steer people's sentiment better

Social media best practices for government

The best way to approach social media is to look at three different uses, Maio advises.

Official use — How the agency as a whole uses social media as a channel for communication and/or engagement.

Professional use — How individual employees are supposed to use social media as a tool, among others, to do their job.

Personal use — How employees should make a personal use of these tools without infringing their code of conduct.

"Interestingly enough, the boundaries between the "professional" and "personal" use is very blurred, and **the best examples of valuable use of social media we have seen is where employees leverage their personal identity (as well as social connections) to solve professional problems,**" says Maio.

"Strategies, in fact, tend to cover the official use above, where most of the potential (in social media) is in the other two."

than if they just stand on top of their own, institutional social media soapbox," Di Maio ends.<



HELPING TO ENERGISE HIGHER EDUCATION AND RESEARCH

As organisations succeed and expand, their IT resources often struggle to keep up. Universities are no exception. As the University of Petroleum & Energy Studies (UPES) grew, its IT infrastructure began to feel the strain. IT had become fragmented – with different departments relying on individual islands of information within the system. UPES’s multiple, stand-alone legacy systems became increasingly unresponsive. In addition, there was no central system to manage the different business processes across different locations, resulting in suboptimal and inefficient performance. Further, there was no real-time availability and seamless delivery

of data. Management had the perennial problem of having to wait to access data from different departments and locations. This was adversely affecting decision making as information was not only delayed, but at times was also incomplete and out of date. UPES turned to SAP for the integrated solutions it needed.

A WORLD-CLASS INSTITUTION

UPES – based in Dehradun, India – is India’s first domain-specific university to focus on energy and allied industry sectors and to offer specialised graduate, postgraduate, and doctoral courses. In less than

three years, it has emerged as a world-class institution, dedicated to developing superspecialised, professional managers and engineers across the oil and gas, power, transportation, and mining industries. UPES currently has three campuses in India – one in the National Capital Region, Rajahmundry in Andhra Pradesh, and a main campus in Dehradun.

READY FOR AN INTEGRATED SAP® SOLUTION

With a robust level of hardware and network connectivity already in place, UPES decided it was time to unify its business systems with a single enterprise resource

planning (ERP) application to support a variety of back-office processes. Further, the university was also keen to extend its computing capabilities to the academic community, especially to its students. After an all around and comprehensive evaluation of its needs and the available solutions, UPES found a solution to all its business-system issues by implementing SAP® software such as the SAP ERP application and the SAP for Higher Education and Research (SAP for HE&R) solution portfolio, which includes the SAP Student Lifecycle Management application.

“We were looking for a vendor that could understand our specific needs and had proven expertise in the area of higher education and research,” says Ashish Bharadwaj, associate director of IT at UPES. “SAP was the only one that had the functional depth in its products and whom we found capable of catering to our requirements – particularly in the areas of finance and accounting. Being built on platforms and technologies that are future-proof in terms of scalability, platform neutrality, and reliability, SAP was a perfect match.”

TEAM COMBINES DOMAIN KNOWLEDGE AND SAP EXPERTISE

After selecting SAP ERP and SAP for HE&R, UPES brought L&T Infotech Ltd. on board as the implementation partner. UPES

provided the domain knowledge and L&T Infotech supplied the skills required for working with SAP core software. The biggest challenge lay in choosing the right implementation model. Other complexities included deciding how to manage change and how to deploy effective workflows for essential business processes. “We received extensive help and assistance from SAP Consulting,” says Bharadwaj.

The implementation team defined its goals: The project objectives included automating business processes, unifying the data in a single source for all business units, gaining access to data anytime, anywhere, implementing collaborative and systematic operational management, improving service delivery, and integrating data seamlessly across business units.

GO-LIVE IN JUST 10 WEEKS

By following each stage in the ASAP methodology, the implementation team completed the project and the solution went live in only two and a half months. The SAP software had more than adequate flexibility to meet UPES’s business needs. Because analysing processes and defining key functional roles and responsibilities had been extensively thought through prior to implementation, very little business process reengineering was required. “However, people

had to be sensitised,” adds Bharadwaj, “that a process, once defined for an organisation, should be followed for the most part – with only rare exceptions.”

By the end of the project, UPES had implemented SAP ERP for financials, controlling, materials management, and human resources (including organisation management and personnel administration). Additionally, UPES has deployed SAP Student Lifecycle Management. UPES also wanted to consolidate access to all its different systems, processes, and information into a single place and found the answer in the SAP NetWeaver® Portal component (formerly SAP Enterprise Portal component).

ONE COMMON PLATFORM: MULTIPLE BENEFITS

All departments and functional areas can now work on one common platform – leading to numerous process benefits and reduction of errors. A vast improvement has been seen in almost every area of the university’s operations. Different business units have been integrated. SAP solutions have streamlined administrative processes, brought in increased operational efficiencies, while providing real-time access and visibility across the organisation. Top management does not have to wait for a department to submit data – it

is now readily available for them to use.

Better visibility built into the system has equipped UPES with a greater ability to quickly generate reports and make strategic decisions, while the finance department uses the software to generate reports based on real-time data. Closings for financial accounts have also become far easier now. The SAP solutions have enabled proactive financial planning, real-time budget visibility, consolidated financial reporting, streamlined cash flow activities, and optimised financial transactions.

In the area of procurement too, SAP has helped UPES minimise costs and enable both plan-driven and ad hoc purchasing, while ensuring compliance with procurement best practices. Employees in procurement use the SAP software to streamline purchasing which leads to improved supplier relationships – all of which helps the university save time and money. UPES now has greater insight into its spending habits, which has enabled it to source from best-value suppliers and negotiate the most favourable trading terms. It also allows the university to collaborate more closely with suppliers and build stronger relationships with them.

REAL-TIME ACCESS TO DATA

SAP for HE&R has been able to provide UPES with real-time access to student data,

seamless integration of data across all business units, a single portal with complete and controlled access to the entire organisation's data, information, and knowledge resources. As a result, communication among faculty and students has improved. The portal provides self-service to students and faculty for basic functions like viewing an individual's own details, grading, and changing contact information. The portal gives users an efficient central access point for information and saves time.

Implementing SAP software has had the benefit of requiring UPES employees to thoroughly understand the business processes and workflows they use. "This change of mind-set has been one of the most important benefits we have derived from our implementation," says Dr. Parag Diwan, vice chancellor at UPES. Employees now have to be very systematic, disciplined, and collaborative in the way they work. "It is a system that has brought world-class experience and best practices to our organisation in the areas where we have implemented it," adds Bharadwaj. Employee concentration on core areas has improved quality, enriched roles and profiles of staff, and increased morale.

The project has helped UPES deploy cutting-edge technology and best practices, resulting in improved business processes and service delivery. UPES is able to serve its customers better

and meet their needs more efficiently. "Fulfilment time has been reduced by nearly 30% and transactional accuracy increased by over 15%," says Bharadwaj. While UPES has had ample opportunity to evaluate the advantages of its SAP implementation and experience qualitative benefits, it is still too early to talk about quantified savings, since the project went live only in January 2007. However, ROI estimates project 30% year-on-year savings at the current scale of operations.

SAP: PART OF UPES'S FUTURE PLANS

UPES aims to be a leading, international institution with state-of-the-art facilities and provide world-class education, training, research, consultancy, and outreach services in its domain. The effective use of IT to help solve business issues and adapt to student demands and government regulations will always have a high priority in UPES's quest to keep costs down and remain competitive. Already a satisfied SAP customer, UPES see SAP solutions as an answer to its growing business needs. In fact, the university is already looking into enhancing its SAP HR solution so it can process its payroll in-house. Meanwhile, UPES's new SAP solutions offer a great experience for all involved – students, potential students, staff, faculty, management, board members, corporate visitors, and alumni. <

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