An overview of eGovernment Policy Initiatives in the South African Government

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ABSTRACT

The advances in technology hold great potential for helping the South African government respond to its challenges namely, better service delivery, better procurement, efficient working and better communication with citizens and businesses. Hence, the implementation of eGovernment initiatives is taking place on many fronts and in many ways in South Africa. By providing online access to information and services through phones, faxes, self-service kiosks and world-wide web home pages, the South African government aims to provide higher quality, faster service to the public. This article provides a broad overview of eGovernment policy initiatives undertaken by the South African government.

Keywords: eGovernment, Public Service, Initiatives.

1. Introduction

The South African government is now experimenting with the eGovernment, to deliver services to all communities namely, those that were denied basic services, as in the case of disadvantaged rural communities. The information revolution has affected how the South African government responds to the needs of their clients in the public service. It has opened up new possibilities for the delivery of programs and services in government ministries. A defining characteristic of the South African public service has been the existence of infrastructure to deliver programs through a network of points of service to certain communities. The South African government has aimed at increasing government responsiveness in service delivery through the adoption of an electronic government strategy. Hence, the legitimacy and relevance of the South African government can be actually enhanced by improved service delivery to the public. New information technologies thus offer the possibility of close and ongoing interaction between government and citizens in South Africa. More importantly, online information would result in the affirmation of previously disadvantaged groups. Online forms of government are non-discriminatory, faceless and consistent. Furthermore, online forms of government are replicable and empowering. The purpose of this article is to report on policy initiatives undertaken by the South African government to promote eGovernment. This paper explores the success stories, failures and challenges with respect to eGovernment policy initiatives.

2. What is Electronic Government

eGovernment is the process whereby government communication and administrative processes are made available online, using technologies like the Internet, interactive voice response, call centres and kiosks

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(The e-Business Handbook 2005). According to Naidoo & Kuye (2001) electronic government "is the continuous optimization of government service delivery, constituency participation and government by transforming internal and external relationships through technology, the internet and new media".

eGovernment aims to provide citizens, businesses and employees with a more efficient public administration in locations that are more convenient for them. In this way, it gives us all access to relevant information, and makes government more accountable to its citizens. Essentially, it embraces three areas (The e-Business Handbook 2005):

eAdministration (G2G): Projects that harness technology to improve government's internal administration processes and its ability to work efficiently by cutting process costs, making more logical connections between civil servants and departments, and empowering government staff to work more smartly.
eCitizens (G2C): Initiatives that connect citizens and improve the relationship between government and its people by improving the way government talks to us, listens to us, and by improving the public services it provides us.
eSociety (G2B): Building better interactions with broader business and society and leveraging technology to work more closely with business, to procure government supplies more cheaply, to develop more efficient supply chains, and to build partnerships with communities and third parties.

eGovernment therefore makes it possible for the government to streamline its interaction with business people, private citizens and government agencies, while ensuring (Naidoo 2004):

- improved public access to government information and services;
- improved quality and cost-effectiveness of government services;
- effective information sharing and communication with its citizens';
- improved opportunities for participation in democratic institutions; and
- processes better relationships with business people and private citizens.

According to Singh & Naidoo (2004) the three critical metrics to measure the effectiveness of eGovernment which are application and service relevance; citizen and business satisfaction; and preservation of trust. The key is to find technology platforms and applications that can drive the transition towards a new model for doing business in government. These must satisfy such basic requirements as the empowerment of citizens, ease of access to services, the enhancement of government image, the inclusion of citizens and leverage of emerging technologies (Naidoo & Van Jaarsveldt 2004). eGovernment initiatives will help transform public service organizations, but organizations must understand the factors that will inhibit and those that will stimulate this change. eGovernment therefore deals with the transformation of the business of government and the transformation of government itself. An overview is given of eGovernment initiatives undertaken by the South African government in the public service.

3. E-government initiatives undertaken by the South African government

In 2001, in line with its Constitutional mandate, the Department of Public Service and Administration (DPSA) developed an eGovernment policy as part of its overall service delivery improvement programme. In preparation for a more convenient, efficient, effective and integrated government service delivery system, the DPSA had commissioned a scooping study in the South African public service. The objective of the scooping was to describe the optimal process by which government can deliver services to citizens, according to critical life cycle events, rather than as defined by government structures and systems. The study captured the entire interface that takes place in the Government-to-Citizen (G2C) and Government-to-Business (G2B) relationship, from the point of view of providing a single gateway through which citizens can interact with government. The study focused on mapping both technology-enabled information flows, as well as the institutional mechanisms through which they are delivered. The outcome of the study

was the development of a vision of optimal service delivery, which reflected those government departments which are better positioned to collect, processes, store and disseminate various types of information, as well as suggestions of the most appropriate mechanisms through which services should be made available to the public (Singh, 2007).

From a government perspective, bringing public servants around to the level of change required to make eGovernment work, is a significant challenge. New ways of thinking about service provision and a need to move towards a more process-based way of thinking are vital to the successful rollout of eGovernment projects. However, there are a number of challenges, such as providing education and training on the usage of the electronic model; addressing the lack of preparedness by government institutions, consumers, companies and SMME's; and managing the negative socio-economic impacts, for example, job losses and other associated risks. In a country where much of the population is challenged by poor infrastructure, lack of resources and unequal access to technology, bringing eGovernment to the people is a testing process. In requires finding innovative ways of reaching remote rural areas through user-friendly and widely accessible interfaces like mobile Internet kiosks, by using licensed intermediaries such as the post office, to facilitate online interaction, or by use of wireless technology using cellphones.

A number of initiatives have been undertaken by the South African government towards this end such as the government's Batho Pele National Gateway Project. An overview is given of the different initiatives undertaken in various government departments, such as the South African Revenue Service's (SARS) e-filing initiative and the Department of Transports' eNatis initiative. The initiatives undertaken by almost all the departments point to steady progress, with the exception for the Department of Transport.

4. Government's (Batho Pele) National Gateway Portal

The Department of Public Service and Administration (DPSA) in conjunction with the State Information and Technology Agency (SITA) engaged in the Batho Pele National Gateway project in 2002/2003 (Annual Report, Department of Public Service and Administration 2004/2005). Phase one of this project was launched in August 2004. The second phase was rolled out in 2005. This project provides information on government services from a single portal found at the government web site, www.gov.za. A number of projects, such as updating the content, language editing of the site, language translation of the content on the site and migration of the portal to a more robust infrastructure, have been engaged upon to enhance phase one. The South African Communications and Information Systems are responsible for maintaining the portal. (http://www.info.gov.za/speeches/2002 Retrieved 01 March 2007).

Information that is available to the public has been increased dramatically (Access< Http://www.gov.za/structure/pubserv.html: Retrieved 14 June 2007). True to the government's stated plans, the site offers a citizen-centric approach, divided into ' Services for People', 'Services for Organizations' and "Services for Foreign Nationals', with each sub-categorised according to 'life events'. Information that is available on the web-site includes: access to government department web-sites; government documents, reports and forms. These include visa applications, passport applications, birth certificates, marriage certificates, death certificates, temporary residence permits, and permanent residence permits, application for registration as a voter and unemployment insurance fund registration. It also includes all government speeches. A South African overview is also provided on the web-site. Furthermore, there is information about travel and tourism and government notices. More significantly there is information on the various acts, bills and draft bills. Citizens can also access information on new government tenders and tender regulations. Moreover, information is provided on frequently asked questions about the South African Government system. The site is upgraded daily with news statements made by the South African Government. Citizens are thus given round-the-clock access to a range of services via an integrated one-stop service centre. As far as site accessibility is concerned, public service points are available via a

network of citizen post offices, public information terminals and Internet cafes across the country. Information from the portal is also accessible via the 1020 telephone number.

5. The South African Revenue Service's (SARS)

One of the early achievements has been the e-enablement of the South African Revenue Services (SARS). SARS introduced its electronic filing (e-filing) initiative in 2001, in accordance with the government' s broader eGovernment strategy in the public service (South African Revenue Service 2007). E-filing of tax is a co-ordinated effort between SARS and private business (e-Gov News Oct/Nov 2001). The main aim of an e-filing system is to facilitate the electronic submission of tax returns and payments by taxpayers and tax practitioners. Income taxpayers may however still submit their returns in the traditional way. However, e-filing is aimed at improving operational efficiencies in order to deliver a better and quicker service. Those who wish to make use of the e-filing system are required to register at the particular service provider, conclude an agreement and receive a private access code and password to access the available services that are offered by SARS (e-Gov News Oct/Nov 2002). E-filing now enables corporate entities to submit and pay certain tax returns online. For individuals, the electronic submission is still limited to provisional tax returns, while annual individual returns are not yet available for e-filing. It is also envisaged that, in the near future, customers will also be able to pay airport tax and customs duties online.

In August 2005, SARS launched e-filing kiosks at many of its branches and is currently working closely with the four major commercial banks on a payment channel project. SARS has also implemented a single view of the customer by deploying the 'Siebel Public Sector Single View of the Taxpayer' solution. Prior to deploying the new system, SARS faced considerable business integration challenges, with fragmented taxpayer information residing in disparate systems. The result was duplicated effort, taxpayer frustrations and inevitably lost revenue (The e-Business Handbook 2005).

There are a number of internal and external factors that have contributed to the success of SARS (South African Revenue Services 2007). Externally, it enjoys the strong political support from government, as well as working governance practices. In this regard, there is a zero tolerance approach to corruption within the department. The e-filing initiative has been effectively implemented. As a result there has been an increase in SARS revenue by over a R100 billion since the inception of its eGovernment initiatives in 2000 and 2001 respectively. Furthermore, in 2007 SARS has simplified the tax return forms, thus making the whole process easier. The e-filing system has helped SARS to create a single view of the taxpayer. It has also helped to keep up-to-date records on taxpayers, which are easily accessible. It has also helped SARS to understand the risk profiles of customers and industry segments. SARS currently receives between 65 000 and 75 000 electronic payments from taxpayers and traders every month. The electronic service is backed up by a number of useful services such as same day processing of all transactions. This addresses the problem previously created by backlogs in the system. The electronic service is also used for extensions on Value Added Tax (VAT) from the 25th of the month to the last day of month.

SARS also has a step-by-step guide on its website to educate and guide customers on tax and its related issues. For example, customers are guided on how to correctly go about filing tax returns electronically and manually. The benefits of the eGovernment initiative by SARS are enormous. E-filing has eliminated the need for tax payers to manually pay their taxes. All customers should do is register online, and payments can be made electronically. This is an ongoing service, available seven days a week, twenty four hours per day, and three hundred and sixty five days a year. The new system has integrated the SARS 'silos', bringing with it comprehensive, real-time taxpayer information, lower operational costs, and better citizen service through improved response times in handling tax interactions. SARS estimates that the project paid for itself in less than two months. Another successful initiative is the Cape Online strategy.

6. Cape Online strategy

The Cape Online strategy in the Western Cape Province of South Africa is another innovative service-driven and citizen-focused e-government initiative that was launched in June 2003 (The e-Business Handbook 2005). The vision of Cape Online is to deliver access to public services online anytime, anywhere. The goal of Cape Online is to improve the internal efficiency and a more effective service by the Provincial Administration to the community. Cape Online focuses on digital delivery, digital democracy and digital development. Digital delivery allows government to provide information and deliver services more efficiently and effectively. The goal of digital delivery is to make it easier for businesses and individuals to deal with government. Digital democracy is a government strategy that attempts to make the functioning of local government more transparent and improve both accountability and legitimacy. Digital democracy envisages the posting of government tenders, reports and meeting transcripts on the Internet. Digital development is a development strategy to improve public access, develop information technology skills and develop regional information and communication technology (e-Gov News Oct/Nov 2002). Cape Online presents a simple interface that will remove the complexities that citizens and businesses currently face in order to obtain services in the Western Cape area.

The Western Cape is in fact ahead of national government in terms of its e-citizen interaction. Early phases of the project involved walk-in information centres and a client contact centre, and in April 2004 the initiative launched its trilingual portal (www.capegateway.gov.za). Through these media, the province has provided the first step in a staged introduction of provincial e-government for the citizens. However, the services are purely informational at this stage, and conducting provincial transactions online continues to be aspirational. Another initiative has been undertaken by the Department of Transport. Unfortunately, the initiatives undertaken by the Department of Transport has been met with several challenges. These are elaborated hereunder.

7. Department of Transport

The Department of Transport has recently attempted to move from the old National Traffic Information System (Natis) to an electronic National Traffic Information System (eNatis) worth R408-million (Department of Transport, 2007). eNatis had technical limitations that had an impact on effective service delivery in the department. eNatis was intended to have improved functionality that was not part of Natis. eNatis uses state-of-the-art technology that is compatible with a variety of anticipated system enhancements. It is designed to cater for enhanced law enforcement capabilities, specialized transactions over the internet and automated teller machines. This was also designed to introduce administrative adjudication of road traffic offences (AARTO) and online registration of vehicles by financial institutions. In addition, the system was to provide a new module that will manage driving license, and learner's license bookings on an online re al-time basis.

The progress that the South African public service made to date across a number of fronts suggests its commitment to the cause, but the delays in progressing beyond information-rich Web sites to real e-transactability point to the complexity of the task at hand. Despite progress and commitment, there are problems typical of a developing country such as poor infrastructure, skewed accessibility, corruption, weak educational systems and a history of oral tradition in our rural areas. The continued roll-out of the 'information phase' is likely to characterize the bulk of eGovernment rollout for the foreseeable future, with limited online transactability, or mechanisms that allow us all to access frequently demanded services as close to the customer's home as possible (such as walk-in or call-centres). Most importantly, however, the commitment to make it happen is there.

Almost all government departments South Africa have their own Web sites offering a range of white papers, green papers, legislation, policies, speeches and annual reports for download, but all are purely

informational. With the exception of SARS, there is little evidence of transactional Web sites. The portal approach has taken shape with the National government Web site and the introduction of a central services portal, www. Services.gov.za, sitting alongside the National and Cape Gateways. Unfortunately, the trend in South Africa is very much towards provision of information alone, with little in the way of full-on transaction with the government. On a positive note, however, the UN reports that this central services portal bodes well for South Africa's e-government progress and future development. While there is some evidence of the portal approach, offering a single point of entry to services (National Gateway and Provincial Gateway), these are very much geared toward providing basic information, rather than allowing the public to transact with government online.

As a strategic resource for the Road Traffic Management Corporation (RTMC) and Road Traffic Infringement Agencies (RTIAs), eNatis was to ensure that all infringements where centralized within the eNatis database (eNatis, 2007). This was necessary to promote improved service delivery with regard to the payment of traffic fines. Road-traffic-related services where to be made available on wider platforms such as ATMs. The new system was to validate examiners, testing centres and appointments. It was designed to prevent unscrupulous public officials from abusing the system by extorting money from the public for driving license appointments. eNatis was to also designed to have functionality to control all face-value documents and future enhancements and to incorporate strict electronic tagging of documents to eradicate the continuous falsification of vehicle licenses, registration certificates and driving license cards.

The eNatis system was launched on the 13th April 2007 (Mail and Guardian, 2007). However, it has failed dismally and has been a huge embarrassment for the department. The system crashed on the very next day after its launch. The result has been, licensing and testing stations across the country have been severely disrupted in few months as eNatis has either completely broken down or has led to the very slow processing on transactions. Long queues outside such stations have angered members of the public and motor industry. The Mail and Guardian (2007) indicated that the Minister of the department was aware of the potential problems that eNatis would create, but instead of heeding the advice of the Auditor General's Report, the go-ahead was given. The Auditor General warned the department in December 2006, that there would be an 80% chance of failure if eNatis took place all at once. The Auditor General found that 19 of 24 aspects of eNatis to be "high risk", including cost, risk management, the 18- to 20-month delay in implementing it, skills transfer, and a lack of human resources during its development. The Auditor General also warned that fraudulent or criminal activities could take place on the system without anyone realizing it timeously.

The consequences of eNatis since its inception are not what the South African government had in mind with regard to the implementation of eGovernment initiatives. eNatis has further alienated the end-user, when its actual purpose was to make traffic management and transactions simpler and quicker. There are also capacity problems associated with its usage, as staff are not familiar with how the system works. Furthermore an effective backup system behind it seems to be absent. Unlike e-government initiatives undertaken by other government departments, eNatis has not been successfully implemented d thus far. There are other initiatives undertaken by numerous other departments.

8. Other initiatives undertaken by the South African government

The Department of Justice launched the eJustice in South Africa which aims at improving the effectiveness and efficiency of prosecutors in the process of Jurice prudence (e-Gov News Oct/Nov 2001). The e-justice system seeks to transform the justice administration system from a manual to an automated system. eJustice is one of the ways in which the Department of Justice hopes to alleviate some of the backlogs in the department (e-Gov News Oct/Nov 2006). A current analysis of the department revealed that currently the courts in South Africa have huge backlogs and prisons in general are overcrowded with a large number of

trial-awaiting prisoners. The justice system also faces severe human capacity shortages to drive the eJustice initiative.

The National Automated Archival Information Retrieval System (NAAIRS) is another innovation, which assist members of the public to identify and locate public records in archival position, containing information that they may require (e-Gov News Oct/Nov 2002). The NAAIRS interface was located in the newly designed website of the national archives. The national archive website is an important vehicle for electronic service delivery, providing extensive information and documentation about the national archives services to the public and to government bodies.

In 2002, the Department of Home Affairs has launched the Home Affairs National Identification System (HANIS) to combat crime (e-Gov News April/May 2002). The Department of Home Affairs is building an automated identification database in which massive amounts of fingerprint data will be recorded. The new system will be used in conjunction with the population register to provide life profiles of all citizens; this system will be used for identification and verification purposes. Immense potential exists in applying this system in policing, elections, population registering or immigrations and emigrations are concerned.

CabEnet is another system used by the President, Deputy President, Ministers, Deputy Ministers, Director-Generals and Ministerial support staff to access and share information and communicate formally and informally with each other. The system consists of a document management system, information management system and knowledge management. The system is rolled out in two phases. Phase 1 is the pilot phase which is currently underway and phase two is a rollout phase to the rest of the departments (Annual Report, Department of Public Service and Administration 2004/2005:20) and (http://www.info.gov.za/speeches/2002 Retrieved 01 March 2007).

9. Challenges facing the South African Government

The challenges facing the South African government in transforming conventional government into electronic government are tremendous (Naidoo 2004) & (Singh 2007). However, designing and implementing an electronic strategy in the South African (SA) environment is a challenge. This is further complicated by the language and cultural diversity of the people of SA (Naidoo & Van Jaarsveldt 2004). Internet access in South African continues to grow year-on-year, but the rate of growth is slower than ever before. South Africa has little more that 3 million internet users, however South Africa lags behind the rest of the world, and will continue to do so until the local telecommunication climate is more favourable. In the USA, the huge Internet user base is 100 million which has given rise to a thriving Business to Consumer (B2C) marketplace.

Although it is agreed that the Internet is a great way to do research and establish customer contact, government departments as well as businesses in South Africa are generally not willing to spend a lot of money on the Internet approach. They are also reluctant as the human element is lacking with this approach. Many government departments, businesses and consumers in South Africa are still wary of conducting extensive business over the Internet because of the lack of a predictable legal environment governing transactions. Furthermore, most sites on government in South Africa are no more than electronic brochures. There is a dire lack of understanding of the powerful role the web can fulfil. For example, South African government sites on the web look electronically-enabled but generally are not. Hence, from an on-line strategy point of view, there is no consideration of the customer. Furthermore, there is no effort to market these sites on-line. Thus, very few government departments in South Africa are employing the electronic model, despite claims that it's the online element of the web that is the key to entrepreneurial government based on business like principles, and cost savings.

Other challenges that that the South African government faces with respect to eGovernment are, namely (Naidoo 2004) & (Singh 2007):

- identifying possible legal barriers to the development of the electronic model;
- providing education and training on the usage of the electronic model;
- addressing the lack of preparedness by government institutions, consumers, companies and SMME's; and
- managing the negative socio-economic impacts, for example, job losses and other associated risks.

Concerns centring on issues such as enforcement of contracts, liability, intellectual property protection, privacy, security and other matters, have caused the South African government departments, businesses and consumers to be cautious. There are major drawbacks that the South African government must address (Singh 2007). Consequently, initiatives by the South African government over a horizon of ten years will have to contend with the ensuing issues (Naidoo 2004):

- ICT infrastructure is weak in geographical areas in which the majority of citizens live because of the apartheid separate development legacy;
- the general education level is lower and ICT degrees are difficult to obtain, hence there is over-dependence on imported ICT goods and services, rather than the development of local solutions;
- organizations have less and shorter experience in using ICT, consequently it takes some time to offer a comprehensive range of services leveraging ICT capabilities;
- information sharing is not common among public sector organizations, and sometimes within an organization itself, given the old silo/command structures, hence the provision of seamless services is usually hampered by fragmented information systems, and fragmented systems will take a while to inter-operate;
- eGoverment readiness varies significantly between government departments, provinces and local authorities;
- there are pressing demands in the public service which make ICT development a lower priority in budget terms. The gap between the ICT development scenario and the reality is big, and needs financial priority; and
- the South African government finds it difficult to recruit and retain competent ICT professionals. eGovernment endeavours require some in-house champions to undertake planning and oversee developments.

From the above, it is evident that the South African government is confronted with innumerable challenges that need to be addressed. Some relevant recommendations therefore follow.

10. Conclusion and Recommendation

The progress that the South African public service made to date across a number of fronts suggests its commitment to the cause, but the delays in progressing beyond information-rich Web sites to real e-transactability point to the complexity of the task at hand. Despite progress and commitment, there are problems typical of a developing country such as poor infrastructure, skewed accessibility, corruption, weak educational systems and a history of oral tradition in our rural areas. The continued roll-out of the 'information phase' is likely to characterize the bulk of eGovernment rollout for the foreseeable future, with limited online transactability, or mechanisms that allow us all to access frequently demanded services as close to the customer's home as possible (such as walk-in or call-centres). Most importantly, however, the commitment to make it happen is there. Almost all government departments South Africa have their own Web sites offering a range of white papers, green papers, legislation, policies, speeches and annual reports for download, but all are purely informational. With the exception of SARS, there is little evidence of transactional Web sites. The portal approach has taken shape with the National government Web site and the introduction of a central services portal, www. Services.gov.za, sitting alongside the National and Cape

Gateways. Unfortunately, the trend in South Africa is very much towards provision of information alone, with little in the way of full-on transaction with the government. On a positive note, however, the UN reports that this central services portal bodes well for South Africa's e-government progress and future development. While there is some evidence of the portal approach, offering a single point of entry to services (National Gateway and Provincial Gateway), these are very much geared toward providing basic information, rather than allowing the public to transact with government online.

The success of eGovernment in SA requires strong and high-ranking political and bureaucratic leadership. The implementation of the government on-line strategy will also require a sustained government wide effort in collaboration with all levels of government namely, provincial, municipal and third parties as well as collaboration with the business sector. In addition, the success of eGovernment will require an effective partnership between the private and public sectors. There is a need to develop solutions and policies in collaboration among government, the public and industry.

The success of eGovernment will also depend on vast amounts of time as well as capital. The South African government should debate and address issues and initiatives required to create an enabling framework for eGovernment in the public sector. Efforts should be speedily made to include a host of stakeholders, to ensure that policies and processes are put in place, that address the needs. The South African government should see its role as an enabler, facilitator, educator and law enforcer to prevent cyber crimes, as well as a model user of the electronic model. Other important issues include the fact that sufficient resources should be made available to ensure successful policy implementation. Accordingly, government should encourage and promote the electronic model by creating the necessary conditions in this regard namely, consumer protection and privacy and establishing and enhancing the necessary infrastructure. There is undoubtedly a great opportunity for commercial and government activity on the Internet. If private sector and government act appropriately, this opportunity can be realised for the benefit of all South Africans. Partnerships between Government and industry will be required, not only to develop the actual strategies, but also to become involved in the integration of the existing, future and newly created digital world entities.

The critical challenge for the South African government will centre on how it sources its capabilities, how to ensure implementation of rules, and how to manage its network, both within and outside the public sector. The South African government should be willing to challenge its existing model, its scope of control and how technology will be applied. It must recognise the importance of an Internet-based strategy in service delivery and building relationships with key stakeholders outside the public service. It should recognise the changing nature of government and how it can use the electronic model to promote its vision of excellence and customer value. The South African government should also take the necessary steps to ensure that public managers understand eGovernment for ensuring its effective implementation. Managers should understand approaches for implementing the electronic model that will span multiple network players and channels. The implications of integrating technology into public sector departments in South Africa will be far reaching. The new fit will entail understanding the fit between government rules, capabilities and technology. The South African government should look at what it means to establish the eGovernment that involves embedded rules and regulations, application program interfaces and the accelerating move to component-based technologies and approaches.

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