E-Government

Challenge and Solutions

Compaq E-Government Marketing

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Section I. – Compaq and eBusiness for Government

It is now abundantly clear that the Internet will become one of the dominant means of doing business worldwide. Not since the advent of the telephone and television has a technology had more potential to change the way we live and work. Out of the Internet age, new paradigms of speed and global competitiveness have fueled new eBusiness initiatives leading to commerce that operates in a 24 x 365 world.

But, in this new century, where even appliances are gaining the ability to communicate as easily with each other as two people, governments need to understand that neither geography, language, nor time remain as barriers to efficient communication. To leverage new communication capabilities and provide faster, more accessible, and responsive services to constituents, governments must adapt advances in eBusiness in order to perform their jobs more effectively.

Today, as eGovernment opportunities are investigated around the world, governments in both the United States and Canada are becoming better positioned to take advantage of the high-tech advances made by the commercial sector, paving the way towards essential and continuous connections to citizens, employees, suppliers, and businesses.

Understanding your role in the emerging Internet economy is crucial

On the way to the new Internet economy, national and state governments will need an environment that is predictable, secure, agile, open for business, and always online. Following the lead of the private sector, these steps have already begun, as forward thinking governments adopt the ways of eBusiness.

On the national level in the U.S., eGovernment directives call for federal agencies to ensure that governmental services are easily accessible to all the American people, while at the state level, many agencies and departments are increasing the information and number of services available online. These actions are also mirrored in Canada. Quebec and other provinces have services online and the federal Government of Canada is stepping up to the challenges of eGovernment

The successful delivery of online services, in collaboration with the private sector, vitally depends on having the right infrastructure – resilient platforms, secure environments, adaptive architectures, layered solutions – integrated with next-generation networks.

But transforming government is not simply a matter of technology. Achieving *eQuality* will rest upon the ability of governments to ensure that all eBusiness initiatives have sound business goals at their core. Because the decision to institute eBusiness in government presupposes the simplification, streamlining, and strategic management of select business processes that are to be integrated with robust IT solutions, the right technologies can then be selected and implemented based on their fitness for the intended purpose.

The economic frameworks of the nineteenth century were adequate for a static and disconnected world, but just as mass production and advances in transportation and communication revolutionized large portions of the 20th century global economy, a global ubiquitous network will do the same for the 21st. In this new world, where everything is moving to the Internet, governments of all size must innovate to serve their constituents most effectively.

The Internet is changing the way business is conducted

The growth of online business has led to a 24 x 365 economy where prospective customers seek alternative suppliers if network delays are greater than 8 seconds. As a result, businesses are increasingly being driven by the technologies that can better manage customer information.

For both the private sector and governments, business models, core processes and network infrastructures are being transformed through a closer alignment between Information Technology (IT) and core business processes. For that reason, enterprises of all sizes are seeking ways to simplify their operations, shorten time-to-solution, and manage their value chains more efficiently.

The business and technological challenges of eBusiness

Today's dynamic, global marketplace demands instant answers, products, and services, while today's educated consumer requires more choices, better quality, and rapid delivery at the most competitive price. The marketplace has changed – it's no longer shelves loaded with merchandise anymore – it's high-tech touch-screens loaded with options in Internet time – 24 hours-a-day, 365 days-a-year. Business "hours" are now obsolete and the Internet economy is continually creating new pressures for both business and government:

- **Transition to eBusiness** – Today, less than 5% of businesses understand how to apply eBusiness and use it as a strategic tool. In fact, 85% of the 5% are entering the eBusiness environment by leveraging their existing legacy systems. While they appear to be ahead today, their approach is likely to cause constraints and loss over time. eBusiness is a process that needs to grow as demands dictate. IT systems must be architecturally designed in a manner that is modular while supporting growth and change.

- **Rapid new business cycles** – As information technology has become more pervasive, business models have changed while business cycles have shortened significantly. Today we are on the edge of, perhaps, the most significant change of to date: change driven by the Internet will be measured by the transaction – by the time it takes to deliver a specific product, to meet the specific needs of an individual customer at a specific point in time.

- **Unprecedented technology demands** – In this eBusiness world, government stands to face unprecedented technology demands for secure and highly available enterprise platforms that are both scalable and manageable. These platforms must be easy to buy, easy to configure, and be ready to plug-in to provide eBusiness services. Most importantly, eBusiness solutions must be completely predictable in a world where the usage, demand, and stress put upon eBusiness solutions may be completely and utterly unpredictable.

Three keys to successful eGovernment include:

- **Selecting systems that last:** reliable networked system architectures. Because many organizations grew their websites from legacy mainframe systems, technicians are, today, still trying to match their systems' capacity to ever increasing demands. Governments will need systems that are designed for scalability, and to counter network delays, dispersed geographically. It may also become necessary to contract for additional capacity from outside resources to meet unanticipated demands created by flash crowds; as might be expected when online tax filings become commonplace and tax deadlines approach.

- **Getting systems up and running fast**: application building blocks. Solution building blocks will be key. Servers and storage will continue to exist, but they will be combined into higher available platforms like clustered servers and storage arrays. An example is Compaq's recently announced clustered ProLiant and AlphaServers, 8-way ProLiant, and StorageWorks systems.

- **Cultivating the necessary professional skill sets:** service professionals. It is essential to keep certain points in mind. Businesses today, like government, are placing a high premium on IT professionals. IT not just supporting the enterprise, but has become integral to the organization. As a result, professionals are needed who are trained to think 24x 365 eBusiness, who know the issues of Internet-based computing, and can architect eBusiness systems that are virtually unstoppable. Finally, eBusiness is NOT a solo performance, both government and business need dependable and qualified partners to succeed.

Compaq's Mission: The NonStop™ Internet Company

By providing the benefits of expertise and proven technology solutions of a company with global experience and wide ranging partnerships, Compaq's mission for eGovernment is the effective deployment of NonStop solutions to more agency levels throughout the enterprise – enabling government to operate successfully and effectively in a 24 x 365 Internet environment.

Compaq Nonstop™ eBusiness platforms, solutions, services, and next-generation networking are unstoppable, and have been engineered to provide NonStop value in the end-to-end, integrated eBusiness environment. These solutions enable organizations to succeed in the Internet marketplace, by providing customers and citizens the capabilities of Internet-enabled and shared business processes among customers, citizens, partners, vendors, and distributors.

Section II.   Issues Affecting eCommerce

The growth of eCommerce raises numerous issues of public policy for governments. These include financial issues such as taxation and electronic payments, as well the legal issues surrounding a uniform commercial code for electronic commerce, intellectual property protection, privacy, and security. In addition, market access issues concerning the telecommunications infrastructure, content, and technical standards will need to be addressed to ensure the seamless free flow of information across jurisdictions, without affecting system reliability, interoperability, ease of use, or scalability.

Some are these issues are new, and some may just require adaptation of existing policies to new technologies. It will be a challenge, but one not to be feared. Governments, however, must be mindful of some of the unique attributes of the networked world, such as its global nature, its pace of change, and electronic commerce's nascent stage of development. These issues do make it difficult to predict what will succeed or come next, but society at large stands to benefit by nurturing a flexible approach regarding governmental regulation in the new electronic economy.

According to the 1997 *Framework for Global Electronic Commerce* by President Clinton and Vice President Gore, that means, that for electronic commerce to flourish, the private sector must continue to lead. Innovation, expanded services, broader participation, and lower prices will arise in a market-driven arena, not in an environment that operates as a government regulated industry. Where government action or intergovernmental agreements are necessary, private sector participation should be included as a formal part of the policy making process.

Compaq Policy Suggestions for eBusiness and Governments

One trademark of the Internet economy has been the market-driven, innovative approach of its growth generated by the private sector. Yet, that does not mean that government is not without its role driving key changes. Government oversight is needed to ensure a stable and

certain legal framework, to drive attention to issues such as privacy, and to encourage private sector efforts in that regard. It is also uniquely positioned to educate the citizenry about the benefits, risks, responsibilities and opportunities associated with e-commerce.

At the same time, just because government has the capability to implement a legal framework, it should refrain from acting unilaterally. The evolution of the 21st century world of Internet e-commerce will require a synergistic partnership between governments, as well as between government and industry. That partnership can become one where industry is allowed to lead and innovate, while government provides the legal structure, predictability, and consistency needed for e-commerce to flourish.

Specific Issues Regarding Internet/eBusiness Regulation

Consumer Confidence – The level of consumer confidence in a community will depend on how well policy makers, businesses, and individuals work together in resolving e-commerce issues and establishing exemplary practices. In the realm of Online Privacy, Compaq believes government should continue to encourage industry leadership and educate its citizens. Supporting this strategy, Compaq is a founding member of the Online Privacy Alliance which fosters policies based on the principles of:

- Notice, Choice, Data Quality & Access, and Data Security

- And "Seal" Programs that provide third-party validation of a privacy program such as TRUSTe and others.

Much progress has been made to date, but there is still more to be done, as indicated by the following study.

The Georgetown Internet Privacy Policy Survey is a progress report to the Federal Trade Commission on the extent to which commercial Web sites have posted privacy disclosures based on fair information practices.

How many Web sites have posted privacy disclosures? 65.9% (238) of the 361 sites (a random sample of the top 7500 most visited webs sites) in the sample have posted some sort of privacy disclosure (a privacy policy notice or an information practice statement). Also, of the Top 100 Websites, 94% posted privacy disclosures, up from 71% last year. Is there still more to do? Absolutely. Those websites that post privacy policies need to understand that they should post more comprehensive policies that address all of the elements of the online privacy Alliance guidelines. In addition, Compaq hopes that even more sites will begin to post privacy policies. It is expected that the FTC will continue to update its data for the current year.

Other initiatives, like those by companies such as Compaq, to not advertise on websites which do not post privacy policies, are important steps that demonstrate the required industry leadership to get more sites on-board. Government should also help drive this market so that

consumers know to look for privacy policies and demand them of the sites they do business with.

Consumer protection – Just as in the offline environment, consumers should be protected against fraud. Innate competitive pressures, however, should drive respectable businesses to provide the requisite protection for their customers. Online consumer protection policy needs to specifically address those who would deliberately harm consumers.

Online businesses should not be discriminated against with additional or different regulations from the offline world unless there is something genuinely unique about the online environment that warrants it. In other words, protections should be the same as the offline world barring any adaptations that may be required for the online environment.

Numerous groups are studying these issues, such the American Bar Association, the Internet Law & Policy Forum, the Global Business Dialogue on Electronic Commerce, the Better Business Bureau OnLine, and the International Chamber of Commerce. In time, this careful work, along with that of the FTC and the states, should lead to a viable legal framework.

In addition, technology may develop to provide new or different consumer protections in the online marketplace. For example, hyperlinks and seals offer entirely new ways to offer notice, additional information, interactive question and answers, and – ultimately – trust to consumers online.

Children – Compaq recognizes that children may need special protections online, and understands the need for balance and flexibility in developing technology for the business environment, as well as the protection of children's constitutional rights, parents' ability to exercise control, and the overall societal interest in protecting minors.

Compaq welcomed COPPA, the Children's Online Privacy Protection Act passed by Congress last year, in addition to just released FTC regulations implementing that law. Applauded, by both the business and consumer communities, as striking the right balance in protecting children's privacy online, it also preserves the interactive nature of the online medium.

Other private initiatives, such as GetNetWise, to educate children, parents, teachers and others on how their kids can surf safely are also strongly supported by Compaq. The use of screening software, when voluntarily adopted by parents, offers an additional tool for parental control and children's protection online.

Compaq partner and offspring AltaVista.com participates in GetNetWise, as well as offering a family-safe searching environment. Young Web surfers can search with a "Family Filter" activated in which parents set the parameters for the content that they consider objectionable.

Security – Essential for consumers, businesses, and government to transact online, security is the final "trust" issue. Compaq supports government pursuing strong policies that promote the use of good security technology. That encourages safe behavior and education to further

ensure a secure environment. One important security aspect is Public-key infrastructure technology (PKI).

PKI technology appears ready to strike a balance between IT's security needs and a vendors' ability to deliver secure solutions. Today, major security vendors have vowed to make their public-key infrastructure products compatible. Deployment of PKI technology, which identifies users and companies and provides encrypted channels for communication, has been beset by Y2K distractions, interoperability snafus and corporate indifference in the past.

But now, renewed cooperation among vendors and signs of increased customer demand – including a 500,000-user health care PKI project scheduled to go live in the near future – are coming together in a way that could finally solidify the long awaited PKI sector.

Another important security aspect is digital signature. Regarded as the electronic equivalent of hand-written signature, a digital signature is unique to the author and is thoroughly verifiable. It is linked to a record, in a manner, such that if the record is changed the electronic signature is invalidated. Digital signatures are extremely important to e-commerce since they enable electronic contracting by letting consumers enter into electronic contracts without the fear of impersonation or identity fraud. They also give businesses the certainty of a binding contract, and the knowledge that they are dealing with a real person. Because Digital Signatures lead to reduced risk, they can help to facilitate the entry into e-commerce by small businesses.

Due to the need to avoid a patchwork approach of conflicting laws from state to state, and nation to nation, and in light of the borderless nature of the Internet medium, a global approach at the state and national levels is sure to become a key factor for the continuing success of e-commerce. That's why the efforts by the US Congress, and the proposed e-commerce bills on digital signatures in many state legislatures, resulting from the intensive work at the National Conference of Commissioners on Uniform State Laws (NCCUSL), betokens good for all.

Compaq believes that cooperative efforts addressing Digital Signature are beneficial, because they provide a simple, rational approach while elevating electronic signatures to equal legal stature with hand signatures, and recognizes important exceptions for wills, trusts, and living wills where the public requires more heightened protection.

Section III. – eGovernment for National and State Government

Compaq views the definition of eGovernment as "enabling the delivery of services to its constituents, by government, over the Worldwide Web – more reliably, more affordably, more rapidly, and with the appropriate security."

In many ways, the demands of the public sector mimic those experienced in the private sector – Internet-speed, global presence, and rapid changes in technology.

The convergence of eBusiness and eGovernment

As an eBusiness IT infrastructure is the foundation for effective eGovernment, Compaq's eBusiness solutions, today, can help address the needs of government. Compaq expects the continuing convergence of the tools used for eBusiness and eGovernment, with the emphasis on providing services in each arena, that are robust, scalable, and available 24 x 365.

The road to developing these capabilities will vary for each organization – some are already far down the road, others are just beginning, but the expectations for performance will be high from customers and constituents alike, because, at the end of the day, they are the very same people.

Government is a complex undertaking

- The citizen is both a user of government services and a "member of the board"
- Governments must operate in the new "information rich" Internet environment
- In streamlined, down-sized environments, all governments need to operate "faster, better, and cheaper"
- Security and privacy of transactions are essential
- Business is increasingly a key partner in the provision of public services
- Governments provide unique services (e.g., public safety, taxation) which pose special requirements

The public sector, however, is unique in a number of ways. The role of the constituent as both a consumer and a "member of the board of directors" is very different from normal commercial experience. Governments, today, operate in a fishbowl like never before – decisions and decision-making clearly have been affected by the global reach of the web.

Pressures to achieve more with less have not let up – indeed, expectations on government for using the tools of the web to reduce cost further are likely to increase. One likely result may well be the growth of government to business partnerships in providing services to constituents.

As the march to the web continues, governments must ensure that all segments of the community are fairly involved. Finally, maintaining the security and privacy of interactions between the government and citizen has become even more important, as the speed and reach of the net has become apparent to everyone.

In this context then, one might view eGovernment as serving three sets of customers: the citizen, the government itself, and the business community.

Citizen as customer of eGovernment – Through Customer Relationship Management applications, government can maximize comprehensive customer relationship management capabilities. Using this model, the citizen, as customer, is likely to look for a number of services, such as access to information pertaining to the individual citizen made available via

the Web – information such as tax assessments, copies of accident reports, or birth certificates.

These records may need to be changed or updated via the Web, or the jurisdiction may wish to permit submission of tax payments or other financial transactions via the Web. This can already be done in a number of states today. Secure methods of validating those persons interacting with the agencies, as with digital signatures, will become a vital aid to the security of eGovernment processes.

Systems for registration of motor vehicles are also being implemented in a secure and expedited fashion on the Web today. Other areas, such as "town crier" functions, permit citizen broadcast on issues of high public interest, or the broadcast of rapidly breaking news pertinent to the citizen.

The Government as customer of eGovernment –Using Knowledge Management solutions is an excellent way for government employees to leverage governmental intellectual assets. In this context, of government as a customer of eGovernment services, Compaq expects to see a focus on harnessing the capabilities of the web to improve the development and communication of laws, ordinances, and policies. These will be communicated so that the implications can be understood at any level of aggregation – from the individual to the community. Information of this type is available today for legislators in certain jurisdictions.

Knowledge management also enables better security and enhanced public safety. For example, by providing mobile data access to police officers of integrated parolee data, or by cross-jurisdiction sharing of information, law enforcement can perform more accurately and quickly.

Planning for future capital investments, such as schools, storm-water drainage, highways and the like, requires mobilization of large, complex data sets that can also benefit from Web-enabled knowledge management tools and GIS.

And because the government must recruit, train, and manage a workforce that effectively implements the business of the people – Web-enabled enterprise applications and reliable, accessible data stores can vastly enhance the effectiveness of the government workforce.

Business as customer of eGovernment –Global Value Chain solutions can enable business suppliers to government the ability to propose and sell products and services to the government while ensuring the prompt, accurate, and reliable receipt of payments from the government. The development of "eProcurement systems", from point-of-sale, to electronic grants management and large scale systems acquisitions, will streamline interactions and reduce inventory management requirements. Improvements in the ability to exchange information between suppliers and government will also facilitate improved implementation of contract terms and reduced costs.

A flexible, secure, integrated, and highly reliable eBusiness network infrastructure

But there is a lot more involved than just designing new applications and databases. A great deal of technology and experience is required backstage to keep everything up and running all the time.

Because Compaq knows how to architect complete, robust solutions – that can grow and evolve as needs and technology changes – Compaq solutions are used to support most of the world's ATM networks and underlie most 911 telephone emergency response systems in the United States.

These same capabilities are critical for the successful deployment of motor vehicle registration systems, driver's license applications, parolee monitoring systems, police report management systems, GIS systems, and large-scale infrastructure improvement projects.

The national potential for an integrated digital economy in the US & Canada

The U.S. Government is well on its way towards fostering the necessary opportunities for businesses and communities to succeed and thrive in the global economy.

This is evident by wide number of programs and initiatives, legislation, and executive direction established throughout multiple agency levels. As outlined in Second Annual Report of Working Group on Electronic Commerce paper, *Towards Digital eQuality,* the administration has taken steps to protect consumer rights and privacy online, facilitate the growth of the Internet, and bring the benefits of electronic commerce to more people.

The results will go beyond the commercial aspects of the electronic commerce and will challenge agencies to use technology to better society through improved health care, education, emergency response, protecting cultural treasures, and improving government services and accountability to citizens.

Information technology already is being used to make it easier for working adults to acquire new skills, increase access to health care in isolated rural communities, and improve the quality of life for people with disabilities. For example, the paper reports that:

- Caregivers for people with Alzheimer's use the Internet to lend each other moral support
- Workers in high-tech companies help students improve their performance in math and science and to go on to college by serving as tele-mentors
- Doctors use interactive tutorials to learn key terms they can use with Spanish-speaking tuberculosis patients
- Middle-aged adults use the Internet to earn contractor's licenses and computers to prepare bids

And, the administration has already succeeded in putting a wealth of information online. Through the Internet, citizens can:

- Download and retrieve publications and forms as well as file taxes
- Look for federal job postings
- Apply for financial aid
- Access environmental information specific to local neighborhoods
- Make reservations at over 50,000 campsites and facilities
- Apply to join the Peace Corps
- Contact their elected leaders
- Communicate securely and privately with government agencies

To the north, the Government of Canada has indicated that electronic commerce is the preferred means to conduct its business. The benefits will include a higher quality, and increased efficiency, of service, along with significant reductions in the cost of services to both clients and governments.

A range of projects are under way across Canada. For example, the Canadian public sector has been at the forefront in the use of electronic databases to procure goods and services. MERX is an Internet-based, national electronic tendering service available on a subscriber basis around the world. Industry Canada's recently launched National Insolvency Search Service allows clients to search data bases on-line. And, Industry Canada has also committed to having all services made available electronically by the end of 1999. Health Canada is developing a national strategy for a Canadian Health *Infostructure* (CHI), initially consisting of a National Health Surveillance System, the Canadian Health Network and First Nations Health Information System.

Provincial governments, which in the past used EDI and public kiosks to provide services electronically, are now moving to the Internet as a lower cost alternative with the potential to reach many more clients. For example, British Columbia Online, Access Ontario, and Atlantic Canada Online provide access to government data bases electronically.

eGovernment throughout the 50 states

The pace of technological development and the borderless environment created by the Internet have brought electronic commerce to a new dimension, bringing with it many new opportunities and possibilities. In California, for example, there is a strong commitment to harness the potential of eCommerce for the benefit of the state's economy, its businesses and citizens.

Californians can update driver's licenses, pay taxes and even enroll their children in school on the Web under a sweeping eGovernment proposal unveiled in December 1999.

Secretary of State Bill Jones, who drafted the proposal, wants to put 90 percent of all government services online within two years through a single Internet portal. And, he wants

the state to bridge the digital divide between those with computer access, and those without, by giving tax breaks to companies that provide low-cost Internet access and computers to poor families.

Calling the eGovernment proposal "a silver lining for the Golden State," Carl Guardino, president and CEO of Silicon Valley Manufacturing Group, pledged the support of the trade organization representing 150 Silicon Valley companies, including the Mercury News, to help develop the multimillion-dollar system. Appearing with Jones at a press conference, Guardino said, "That portal for progress runs directly between Silicon Valley and Sacramento [the state capital]."

Almost a dozen states have most of their services online and have portals that were created without state funding and are paid for by transaction fees that were charged before the agency went online.

In another example, Pennsylvania, like most states, is seeking an approach to eGovernment that is based on trust, accountability, cost-effectiveness, and established standards. Going by the example of other states, the following areas are ideal candidates for online operations:

- consumer protection
- licenses and permits to business
- motor vehicles, where there are large populations to service
- revenue generating agencies
- recreation, including hunting, fishing, and boating permit

Many state and federal agencies are making a similar push to reorient themselves around the Internet. Government organizations such as the state of Washington are making vast warehouses of public information available to taxpayers via the Web. Citizens can find everything from the forms they need to start a business to information about environmental regulations.

Innovative federal agencies are also aggressively giving citizens access to public information over the Internet. The Environmental Protection Agency has already set up access to EnviroFacts, a site citizens can use for information on drinking water tests by ZIP code.

Perhaps the biggest federal project to make public information accessible from the Web is going on at the Smithsonian Institution. The organization has begun a project to put digitized images and text, describing most of its 140 million items, onto the Web where citizens will be able to search for and even examine them from different perspectives. Public access is expected within a year.

Compaq's recommendations for immediate eGovernment development

National and state governments are doing an exceptional job in their quest to improve their level of services to citizens. It is part of a larger vision, involving very lofty goals and

admirable strategies. Governments understand that to reach and serve constituents effectively in the Internet age there will need to be a very heavy dependence on technology.

Compaq agrees with this view and believes that certain technological resources are driving the radical changes in businesses, governments, and academia. These include:

- Internal communication – online messaging and collaboration
- Client needs databases – directories and records management
- Payment administration – Financial operations
- Management of data across remote sites – integrated storage
- Single access to government services – web portals

Early adoption of these technologies at the national and state level will be critical for governments determined to reach their eGovernment goals. And to underlie these technologies, Compaq advocates the implementation of resilient platforms and strong professional services.

Compaq: From vision to the reality of eGovernment

Today, eBusiness is a process, a journey, that requires the careful alignment of IT and business needs to develop an infrastructure of systems and information flow that will support business goals, objectives and processes for governance in the digital age.

As when taking any journey, one needs to begin with an overall vision of where you want to go. Consistent with that vision, organizations need to tackle vital issues such as digital signatures, security, online services, and portals by understanding that the key solutions will be a blend of intelligent processes and robust NonStop IT solutions. Governments should not automate old bureaucratic ways; the elements of success are to first simplify, then integrate, and lastly automate.

Compaq's flexible and scalable eBusiness strategy puts the Internet at the heart of government enterprise. This Internet-enabled enterprise requires an unprecedented integration of new and existing applications and databases that are supported by a robust, NonStop infrastructure powered by a range of platforms that can be right-sized for the needs of government.

What Compaq can provide for Government

The rules are changing fast, and as governments incorporate Web technologies to streamline interactions with citizens, businesses, and employees, they must adapt their business models to the new paradigms of eBusiness. This can be a difficult and time- consuming process. But the ability to successfully meet this historic challenge with bring with it historic rewards.

Compaq recognizes the need for a wide-range of competencies to address industry standard solutions for the volume market as well as 24 x365 availability, high volume transaction

processing, application integration, payment systems, mission-critical services, and security. With NonStop™ eBusiness solutions and professional services, Compaq has been able to deliver higher levels of reliability and availability, more affordably, and faster than any other information technology company.

Based on four key dimensions – availability, scalability, manageability, and security – Compaq NonStop eBusiness solutions maximize operational efficiency, business agility, and customer intimacy. Examples of Compaq's core competency in action include:

- 18 million subscribers online and happy at AOL with up to 1.2 million concurrent user sessions.
- Compaq Fault-tolerant Himalaya and Integrity platforms, that keep the New York Stock Exchange and Nasdaq running without interruption and support millions of online subscribers on major Web sites. Independent research shows that Himalaya systems attain 1.8 million transactions per hour and 99.9995% application availability.
- Industry-standard platforms, including Compaq ProLiant servers, TaskSmart severs for Internet caching, and StorageWorks solutions.

Leadership in eGovernment around the world

The changes brought about by e-commerce are sweeping across the planet. The Internet is transforming everything about our world – the way we communicate, the way we buy and sell, the way we compete. The Internet is clearly becoming the dominant means of doing business. And for governments, there is no exception.

Federal and state governments across N. America are absolutely correct in pursuing the resolution of how government will interact with its customers, its citizens, with businesses, and with other governments. The realization, that now more than ever, this is an economic development issue is well understood. Governments that make e-commerce easy for constituents provide economic advantage for all.

Compaq also understands these issues. As a full-service provider of enterprise solutions, countries all over the world, such as Great Britain, Norway, Korea, China, and Singapore have called upon Compaq to take a leadership role to accelerate the growth of e-commerce in their economies.

In fact, a key element of the cooperation between Compaq and China's Guangdong Post and Telecom Administration (GPTA) is the development of an e-commerce technology center whose initial developments will focus on digital certificates, Secure Electronic Transaction (SET) payment gateways, and end-user e-commerce applications for the telecom industry in the Guangdong Province. GPTA provides the Guangdong province with more than 12.6 million telephone lines, supports more 3.7 million mobile telephone users, and provides 19 percent of China's total telecommunication revenue.

The fundamental driving force behind the re-engineering of government is a vision of the evolving 21st century state. One, without the conflict of politics, where technology and enlightened policy are able to work together hand-in-hand. Today, throughout N. America, citizens stand before a new century confident in the promise of their country for their children and future generations. Success, in this rapidly changing world – just as success realized throughout history, will be achieved because of a nation's diverse talents, values, and commitment to work together.

As the second largest computer company in the world, Compaq is committed to helping these government enterprises succeed with eGovernment. Through exemplary models of public and private partnership that are driving NonStop eBusiness solutions across their enterprises, governments, with partners like Compaq, are developing the strategies and market focus to ensure great success today.

References and eGovernment Links:

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