Commonwealth of Virginia
Council on Technology Services

Result of the Secretary of Technology Customer Summit

The following is a compilation of the issues, in priority order, that are of greatest importance to the Secretary of Technology's customers. These items were identified at the Customer Summit, held on Feb. 28, 1999, that was hosted by the Secretary of Technology. The issues are divided into five topical areas: consulting, computer services, telecommunications, the Internet and planning.

Consulting

1. Customers would like to have a common understanding of the services, resources and technical skills available through DIT. This information should be current and easily accessible by the agencies. Additionally, DIT should conduct a general survey of the resources and skills that agencies possess. The results of this survey should be cataloged and made available on the Internet so that agencies who have a need in a particular area can contact their peers who are "experts" in that field.

2. Customers would like assistance in conducting research to avoid the duplication of multiple agencies expending resources to study the same topic. They would like a warehouse, or database, of white papers highlighting the results of current research and addressing specific questions relating to both new and widely-used technologies. Topical examples include: videoconferencing, 4th generation languages, imaging, telecommunications, and purchase vs. lease of equipment. Additionally, customers are interested in a catalogue of technology projects that agencies are either currently working on or are planning to initiate in the near future.

3. Customers would like DIT to adopt a proactive consultancy approach so that each agency is assigned a single point of contact to assist in identifying information, resources, and services specific to that agency's needs. The agency contact would be knowledgeable about that agency and would maintain an on-going relationship. Additionally, agency contacts could serve to gather and share knowledge about best practices throughout the Commonwealth. Some suggested roles for this point of contact include: customer service advocate; best practices communicator; information broker; agency advocate; and strategic directions communicator.

Computer Services

Priority 1: Remote Access Services
DIT should determine the best technology to provide standard communication links between regional facilities and agency central offices. The Secretary of Technology should identify and recommend universal product sets to provide uniform functionality among state agencies and should issue procurements for the statewide use of these products (i.e., Microsoft Office Suite, etc.).

Priority 2: Web Enabling -- Mainframe Based Applications
DIT should provide and support a suite of middleware and security products that facilitates access to legacy data stored on the enterprise server. This support is needed for all major product sets (i.e., CICS, ADABAS, UNISYS, etc.). DIT should contract for both implementation services and product support.

Priority 3: Documents Imaging
The Secretary of Technology should develop and implement statewide standards for archiving records. This research and implementation should utilize an agency familiar with the archival process (i.e., State Library) as the primary service provider. Research and development of this technology should be performed to determine the best practices for scoping and test bed development. The solution, where practical and feasible, should take advantage of the Commonwealth's economy of scale. Consulting services for advice on archival systems should be available to agencies. The solution should utilize standard hardware, software and database indexing in order to facilitate the easy transfer of data among agencies. The appropriate network infrastructure needs to be installed in order to support the transfer and retrieval of files.

Priority 4: Lessons Learned Warehouse
Policies need to be developed that encourage and facilitate standard and flexible ways to access and share agency data. Additionally, a mechanism to share experiences through chat rooms or information summits should be developed. The Secretary of Technology needs to coordinate the implementation of these policies.

Priority 5: Web-enable the Industrial Site Selection process via WAN
Agencies need to access/share source data needed for the industrial site selection process, not just front-ends or interfaces. Data is currently individually maintained by each agency. The Commonwealth needs an infrastructure that will make data sharing easier, without compromising security. A requirement of such an infrastructure is a telecommunications environment that is fast, efficient, and reliable. DIT could provide a distributed service center, or hub, for infrastructure conduits to agencies' data.

Telecommunications

Priority 1: Make state procurement process more flexible; form strategic alliances with vendors.
The current procurement process (including standard contract terms and conditions) needs to be modified so that it is more streamlined to permit the acquisition of goods and services in time to take advantage of changing market conditions. The Commonwealth needs to adopt those "best practices" (available from either the public or private sector) that will enable it to provide better services at a lower cost, and these "best practices" need to be incorporated into the Commonwealth's procurement laws, policies and procedures. Procurement regulations need to be simplified and made available for electronic searches. Information on contracts (in particular, step-by-step procedures that clearly show how to procure specific items) and staff contact information need to be more readily available (via the web). Finally, the procurement process needs to be sufficiently flexible to permit the purchase of goods and services from contracts that are available to any governmental agency, including those at the local, state and federal level.

Priority 2: Create robust communication within the Commonwealth through commercial Internet Service Providers so that the general public, including the economically disadvantaged, can access Internet services.
Today, the average use of the Internet by citizens of the Commonwealth does not require high bandwidth since it is used primarily for e-mail, searching for specific information (surfing), and limited e-commerce. In anticipation of the impending explosion of e-commerce on the Internet, each citizen needs to have economical, toll-free access (at least 56KBps) to Internet service. This need can be addressed by creating partnerships with the private

sector and creating financial incentives for the provision of economical, toll-free Internet access to the citizens of the Commonwealth.

Priority 3: Make videoconferencing more robust so that it can encompass uses such as distance learning and virtual courtrooms.
A comprehensive study of existing and emerging video conferencing technologies needs to be conducted to determine how these technologies can best meet the Commonwealth's needs; this study should determine how and when to deploy these technologies. Examples of such technologies include analog and digital satellite, compressed video bridging, PC-based video via the Internet and webcasting. Video conferencing can be used for purposes as varied as distance learning, video courtrooms, telemedicine and regional branch meetings, just to name a few potential applications. Standards for interconnection, equipment and protocols would need to be established and published. The Commonwealth should seek to promote statewide video conferencing capabilities to reduce travel costs, to promote telecommuting, to assist traveling employees, to increase productivity and to facilitate communication with constituents. A variety of options should be available so that both large and small agencies can take advantage of this technology. Lastly, this success of this technology is dependent upon vigorous efforts to educate end users about its installation, deployment and implementation.

Priority 4: Support research and development by the State, especially in the field of bandwidth technology.
This category has two distinct facets. One area focuses on pure information technology research to develop new products or add functionality to existing ones through cooperative arrangements (i.e., partnerships between the agencies/institutions and vendors). The second area focuses on applied research -- the evaluation, application, and implementation of existing technologies to meet agencies' requirements as documented in the state's information technology strategic plan. The general goal is for agencies to effectively share knowledge in order to obtain more comprehensive and robust technology solutions than if they were working alone. This goal can be achieved through cost-effective access to private sector IT consulting services and on-line access to IT research being conducted by the colleges and universities.

Priority 5: Create data transfer that is reliable, inexpensive, instills high confidence in its users, and is marked by reduced complexity that serves to keep expenses down.
The Commonwealth's existing data network does not enjoy the same level of customer confidence as the voice network. In order to improve reliability and customer confidence in data transfers, proactive network monitoring tools need to be installed so that problems can be handled in a more timely manner. In order to reduce the complexity of the network's administration, it would be beneficial to establish "Internet Standards" for data transfer in state government. Utilizing electronic data exchange for service ordering functions and providing billing information via the network could streamline its administration. Access of this data through the Web, with appropriate security, would be beneficial to the clients.

A study of ways to best incorporate voice, data, and video into a single technology should be initiated with the goal of meeting the needs of remote areas and schools as well as serving economic development purposes.

A need to examine international connections for data transfer to promote business trade surfaced as a potential new business opportunity that should be explored.

Internet

Priority 1: What is the state's role in providing Internet access to the public?
A statewide strategic direction statement for Internet access and use needs to be developed because in the absence of such a statement, each agency and institution is left to develop its own strategy, governing policies and

procedures. Once the Commonwealth's role has been defined, a taskforce should be established to coordinate Internet development, sharing of resources and funding at the statewide level.

Priority 2: On-line applications for state services and use.
There is a need to exploit the service delivery aspects of the Internet for the benefit of the Commonwealth's citizens. This could apply to needs ranging from simple requests for information to requests about how to receive services. There are a host of privacy and security issues, requiring statewide and agency-specific policies, which need to be addressed before the Internet can be utilized to its fullest potential.

Priority 3: Procedures to address electronic signatures and use.
A number of agencies are researching products and devices to perform various authorizations and identification verification requirements; however, more work needs to be done in this area before the technology will gain widespread acceptance. There are also concerns about how to govern employee Internet access and use privileges. There is a growing concern among agencies that unless there are some written Internet access and use policies in place it would be very difficult to control inappropriate or unauthorized use.

Planning

1. State government should define an information technology architecture that clearly establishes guidelines and standards for current IT operations and future IT development. Definition of this architecture must be stakeholder-driven.

2. State government needs a simple, flexible and integrated IT planning process. The planning process should provide a common way of defining agency business activities that can be applied to both strategic and IT plans and also be utilized in budgeting, accounting, contracting and performance measurement systems. The process should allow adequate IT planning flexibility to accommodate agencies that vary in size and mission, possibly through the tailoring of planning guidelines and standards. The process should minimize paperwork and emphasize the use of Web-based technology.

3. State government needs an IT intelligence sharing mechanism that provides information on what other agencies are doing in IT. It should routinely provide current information regarding state and industry IT "best practices" and serve as a knowledge base for IT planning.

4. State government needs a budgeting or funding process that can be effectively integrated with the IT development lifecycle. The process should consider information technology a capital investment and provide for the funding of that investment beyond a two-year budget cycle.

5. State government needs a more responsive and timely IT procurement system that can meet customer needs in a rapidly changing technology environment. Without such a system, customers will not be able to effectively implement their IT plans.

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