AG Vision for California by 2030

By: IT Services at CDFA

The Office of Information Technology Services (ITS) recognizes that it plays a crucial role in the delivery of CDFA mission-critical services. If California Department of Food and Agriculture (CDFA) is going to meet the objectives identified in an Ag Vision for California by 2030 it is critical that IT be aligned with the business processes and goals of the Department, and that IT evolve with the rapid changes in technology and the expectations of stakeholders and the public.

New, technologically-advanced applications will impact plant health and pest prevention, food processing, animal health and disease prevention, audit and inspection programs, and the development of efficient emergency response systems that result in better public health and safety. These applications will be accessible by the web and available to all constituents anytime and anywhere. Our application systems will have to be able to interface and interact with other computer systems via the internet. Organizations will expect that our systems will talk to theirs. Data sharing agreements are likely to be common. We must be able to accept, analyze, manage, and utilize the vast amounts of data that will be streaming onto the internet from automated sources and other computer systems. The visualization and presentation of data will emerge as an important aspect of management. Maps and Geospatial Information Systems will be a key factor and will be used as a visual communication vehicle to effectively manage emergency response actions, ensure inspection and compliance of those in the Agricultural industry are held to the highest standards, monitor and control disease outbreaks in animals and mitigate potential risks to the food supply.

ITS will be responsible for ensuring that the necessary infrastructure is in place to support these services on a continual basis as well as to respond to field staff who will need to send and receive data as a normal part of their work activities using handheld or wearable devices. This will result in a large supply and demand for data that must be validated, accepted, and delivered by our IT systems, and must be incorporated into a useable, consolidated database.

CDFA border stations will emerge as an important data source. At some point in the future, vehicles entering California are likely to be electronically inspected by an array of sensors including video and chemical detectors that will flag vehicles likely to contain agricultural threats. Cooperative data agreements with the CHP, USDA, and Homeland Security may result in additional functionality such as notification of other agencies upon detection of radioactive material, license plates reported as stolen or on watch lists, or amber alert activities.

The biggest challenges in achieving this vision are the shift from manual systems to automated systems and information. This will severely impact resources dedicated to

Information Technology activities. CDFA will be fighting threats with information instead of the traditional method - throwing people at the problem.

CDFA must transform itself to cater to the constituents of the future. In 2030, today's two year olds will be 24 and today's 24 year olds will be 46. They will have far greater expectations when it comes to how they will interact with government. They will expect to be able to make any payments to CDFA electronically for licenses or other fees. They will expect to be able to find any information they need via the internet anytime and anywhere; having to make a phone call to request information is likely to be considered archaic.

Recruitment and retention of competent IT staff will be a significant issue in achieving this vision. In order to be competitive in this arena, CDFA must initiate a "Work Anywhere" policy that will have a positive impact on the quality of life, employee satisfaction, and the environment. This is made possible through top-down directives and a paradigm shift from the exclusive use of a physical office infrastructure to a virtual office infrastructure. By having a Work Anywhere policy in place, CDFA will be able to retain good employees, recruit stronger candidates, and improve productivity. Furthermore, the maturity of the information technology resources enables the employees to continue work from many locations away from the main office. The work Anywhere concept can be an important strategy for use in responding to emergent situations and facilitating business resumption activities that directly impact food safety, disease prevention in animals and pest prevention and eradication. The adoption of a Work Anywhere policy will, also, uniquely position CDFA to further the State's "Green initiatives" by contributing solutions for larger issues facing California: *Fewer vehicle emissions/ less wear and tear on congested roads*: Implementing work Anywhere strategies can help the environment by reducing the number of vehicles on the road, which reduces overall emissions while also reducing road congestion, traffic congestion, dependence on oil, air pollution, and quality of life to name a few.

Finally, in the year 2030, there will be change management issues with regard to policies, practices, and procedures affecting how food is protected, processed and managed. Current funding for IT is not adequate to support today's business needs of the department, let alone facilitate the strategic initiatives and best-practice processes and tools that will be required to support the increasing business demands of the future. Having adequate funding for a more mature, adaptable, and state of the art Information Technology infrastructure at CDFA is of great importance in order to plan for and implement an infrastructure that is necessary for the vision described above.