

e3.ky.gov

Digital Government: Government to Citizen

Commonwealth of Kentucky

Section B: Executive Summary

e3.ky.gov is a demand-driven information and services web portal that integrates Kentucky's education, employment, and economic development data. It provides no-cost access to specific job-related services for seekers and employers, and a wide selection of searchable workforce and educational data for researchers, program planners, economic developers, elected officials, the general public, and others interested in Kentucky's human capital and economic landscape.

Rather than replicate other technology initiatives, e3.ky.gov was built with leveraged resources to work with existing systems and create a gateway approach. It eliminates the need to navigate multiple government web sites and makes high-demand information searchable in a dynamic, geographically layered format specific to Kentucky, its internal subdivisions, and the regional economies shared with neighboring states.

In exploratory stages (August 2004-March 2005) e3.ky.gov development received approval to begin initial development began in August 2005. v1.0 was built with Kentucky Adult Education's (KYAE) allocation of FY 2003 Workforce Incentive funds (\$400,000) provided by the U.S. Department of Labor, Employment and Training Administration. KYAE also provided first-year sponsorship, including on-going development, implementation support, maintenance and support, and marketing. The e3.ky.gov web site "went live" with v1.0 in May 2005.

Since e3.ky.gov provided selected services for both job seekers and employers, the Office of Employment and Training (OET) recognized that, with modification and expansion, e3.ky.gov offered the most cost-effective option for Kentucky to address the loss of America's Job Bank (AJB). Since the mid-1990s, AJB was used by most state workforce agencies as a national labor clearinghouse for job orders and job seekers.

e3.ky.gov v2.0 development began in August, 2006, focused on Kentucky's no-cost, self-service employer functions and charged with the goal – *to revolutionize the way that OET does business*. Bringing OET's services to the employer's desktop and allowing employers to contact job seekers without staff intervention were among the challenges that developers faced in an 11-month initiative. Version 2.0 was "live" for employer use on July 2, 2007, at a cost of \$350,000 in Workforce Investment Act Administrative and America's Labor Market Information System funds.

Governed through a unique, multi-agency/cabinet collaboration, e3.ky.gov uses a comprehensive structure to manage and enhance the application. Coalition partners include the Kentucky Adult Education (KYAE); the Office of Employment and Training (OET); and the Education Cabinet's Division of Technology Services (DTS).

Section C: Description

Problem Statement: In February 2006, the U.S. Department of Labor (USDOL) announced it would close its national employer-job seeker website, America's Job Bank (AJB), on July 1, 2007. As with most states, Kentucky relied on AJB as its primary website for employers to post jobs electronically. AJB sent Kentucky job orders in a nightly batch interfaced to the Employ Kentucky Operating System (EKOS), the case management and federal reporting application used by the Office of Employment and Training (OET) and the Local Workforce Investment Areas (LWIAs). As a second option, Kentucky employers could post jobs on OET's website, but these were e-mailed to offices and required field staff to manually re-enter the jobs into EKOS.

The AJB loss was a major technological challenge for many state workforce agencies. USDOL encouraged states to develop their own self-service systems or to partner with emerging private-sector providers, many of which charged employers. Placing this cost burden on Kentucky's small- to mid-sized employers would be an unfriendly solution.

Assessment and Decision:

Kentucky's e3.ky.gov web application already interfaced with EKOS to allow registered employers access to job seeker resumes to evaluate worker availability for business creation or expansion. Adding self-service, job-posting functionality was the logical next step, but leadership asked staff to explore commercial options to replace both EKOS and e3.ky.gov. No single commercial application matched this model. Purchasing even core pieces of the commercial functionality started at \$10 million, with customization driving costs even higher.

Time also was a critical factor to selection. USDOL's announcement left states only 16 months to find or develop their solutions. Those looking for a single-source system faced an 18-24 month conversion, platform changes, and time/costs for statewide staff retraining.

Prior investment and familiarity were additional factors. e3.ky.gov (v1.0) had received outstanding reviews and encouragement from Dr. Helen Parker, Regional Administrator, U.S. Department of Labor, Employment and Training Administration in Atlanta. The website also was selected as one of 10 Southern Regional Finalists for the U.S. Council of State Governments' *2007 Innovations Award*. More than 40 organizations had seen e3.ky.gov demonstrations since July 2006. More recently, e3.ky.gov received the 2008 *Best of Kentucky* award for Best Application Serving the Public.

Solution: e3.ky.gov v2.0's scope required modules for employer registration, job posting, account management, employer-seeker interview connections, security and administration, management information reporting, and features for user e-mail and interactive voice response. The project team included a project manager/business analyst, two business experts, four developers, two database administrators, two quality assurance testers, and five additional business experts/testers. The team used Seapine Test Track Pro to track defects in the testing.

Project Management: Given the volume of work and a non-negotiable delivery date, the team flowcharted and prioritized all modules, and prepared high-level functional requirements so coding could begin. The PM and analysts refined the requirements over four months, closely collaborating with developers and selected field staff. Requirements were approved per module as prioritized. Quality assurance and user acceptance testing also were layered to the priority schedule, with a final month for integration testing followed by three weeks of intensive, statewide training.

Solution Architecture: e3.ky.gov is built on an Oracle platform and database, compatible with the platform for EKOS and Kentucky's job seeker registration module. The graphical user interface is written in .Net and Sequel is used for session management. The system interfaces with EKOS using APIs.

Communications Plan: Throughout the v2.0 development, which involved mainly staff from OET and DTS, Kentucky Adult Education maintained an aggressive marketing and demonstration schedule to encourage use and promoted the coming features. A coalition marketing committee initiated internal communications, news releases, and materials development for the soon-to-debut v2.0.

Barriers, Challenges, and Opportunities: Perhaps the greatest barrier to e3.ky.gov occurred during initial discussions of the project scope, which extended across multiple agencies and cabinets that housed a variety of data sources in a wide array of formats. While the concept of integrating education, employment, and economic development data sources was not new, the institutional memory of less successful attempts resulted in concerns that the task was inherently difficult, by nature of the data variances, format inconsistencies, and varying schedules on which the data was released and updated.

In the project's exploratory phase, representatives from 12 government entities discussed the initiative and provided valuable input on potential data sources, their availability, and how to make the data more usable for shared audiences. This input proved critical to short- and long-term planning and strategy. The exploratory was subdivided into investing agencies, data-source providers, and user agencies. The investing agencies, in cooperation with the Education Cabinet's Division of Technology Services, moved the development and coordinated access with the specific data-source providers.

In November 2004, Kentucky state government administration passed from Democratic to Republican leadership, which required project staff to "re-sell" the e3.ky.gov concept to newly appointed officials. This challenge also was accompanied by a major reorganization in state government. Additionally, new leaders requested additional steps to ensure the project's viability, all of which proved to be opportunities. They included:

- Two independent market research projects were contracted to examine non-government user needs and to obtain input for functionality development.

- A marketing/public relations firm was contracted to develop the web site's banner and artwork.
- An expanded project charter that defined ownership and funding responsibility, by module; an expanded governance structure; and a three-tiered budget strategy with cost sharing for routine maintenance and support, and individual agency responsibility for specific development or enhancements, and for a one-year implementation support period. The e3.ky.gov Coalition Charter defined five guiding principles to drive development:
 - Provide a demand-driven, web-based tool for multi-audiences.
 - Leverage resources whenever possible or practicable.
 - Continuously improve the product.
 - Avoid duplication/replication of functionality in other Commonwealth applications.
 - Maintain geographically layered search formats that are specific to Kentucky.

Section D: Significance

Beneficiary Groups: e3.ky.gov audiences include students, parents, job seekers, educators, career counselors, employers, economic developers, researchers, program and policy planners, legislators, state government agencies and staff assisting any of these groups, and anyone interested in Kentucky's human capital and economic landscape. In addition, the America's One-Stop Operating System (AOSOS) Consortium has asked to review the e3.ky.gov application for consideration as its "employer self-service" module. AOSOS, the parent application for EKOS, was designed by Syracuse-based NaviSite, and also is used by Nevada, New York, New Jersey, Rhode Island, and the Virgin Islands.

Benefits to Public

- Provides simplified, consolidated access to on-demand data and services at no fee on a 24/7 basis. This single point-of-contact reduces navigation through government web sites and links users to more than 2,500 services and data sources (local, state and national).
- Displays educational credentials of Kentucky's workforce for business location and expansion, and provide instantaneous results for analysis, comparison, and timely development/delivery of information and requests.
- Blocks employment scams and prevent unfair job order competition by validating company FEINs and whether users are legitimate FEIN representatives. A job-post review process prevents litigation against employers by editing any discriminatory language and Affirmative Action issues.
- Blocks employment scams and prevents unfair job order competition by validating company FEINs and whether users are legitimate representatives of an FEIN. A job-post review process prevents litigation against employers. All job posts are reviewed for discriminatory language and Affirmative Action issues.

- Tracks and flags Unemployment Insurance claimants who consistently refuse interviews while drawing UI benefits, which employers pay. This data can be used to intervene with claimants and/or re-evaluate their monetary eligibility.
- Automatically notifies employers about the status of their registrations, job posts, and seeker contacts; notifies job seekers of employer interest, and provides job summary and employer contact information. For seekers without e-mail, contact is made through interactive voice response. Employers and job seekers may connect for interviews without staff intervention.
- Markets Kentucky's largest repository of active job seekers to employers using criteria for Kentucky-specific demographics, job titles, education, and occupational keywords. Employers may review, manage and store job seeker resumes and job posts in a secured user account.
- Directs students and job seekers of all ages to available training opportunities, adult and postsecondary educational opportunities (GEDs, certifications, and degrees), and any special-needs services relating to their education and employment statewide.

Benefits to Agency/Government:

- Provides all state government staff with access to critical education, career assistance and guidance, and employment resources to assist shared audiences.
- Automatically notifies designated OET/LWIA staff when employer registrations and job posts have arrived in work queues. Staff need only check their Outlook inbox to see pending work.
- Handles approximately 25 percent of Kentucky's total job orders and replaces web site entry form that required field staff to manually enter jobs to the EKOS system, reducing staff workload by 500 manually entered jobs per month, or about 41.6 hours per month.
- Provides framework for on-demand management information reporting capabilities to OET/WIAs, including system-generated documentation for staff performance measures on timely processing of user registration validations, job post reviews and approvals;
- Refocuses OET/LWIA staff on case-management activities for mediated job seekers and employers by providing a new on-line channel of service for self-service employer-seeker connection.

Policy, Strategy and Goal Alignment: Kentucky's focus on e-government growth – from increased on-demand, one-stop models to expanded broadband and infrastructure access – has been a priority throughout the last two gubernatorial administrations. Such initiatives as Paul Patton *Empower Kentucky* and Ernie Fletcher's *Prescription for Innovation* allowed Kentucky to climb from 44th (in 2003) to 4th (in 2007) in Brown University's "State and Federal E-government in the U.S." study. Additionally, the federal government's departments of education, labor and commerce have pushed states to recognize the inextricable link and impact that education, employment, and economic development have on the lives of all citizens.

Section E: Benefits of the Project

Because e3.ky.gov's initial development was timed to avert a major system change, the system is credited conservatively for investment avoidance of slightly more than \$9 million. Kentucky invested \$997,000 in e3 as an alternative solution to the \$10 million estimate provided for core functionality that would not have matched e3.ky.gov's capabilities. While the decision to develop internally may not be a true instance of cost avoidance, it is significant decision factor for any small state with limited resources.

Financial Return on Investment:

By eliminating staff manual entry of approximately 500 jobs per month, or about 41.6 hours per month, the OET saves \$12,500 annually. In addition, staff has a comparable number of hours to shift toward case-management and other mediated client services, which is critical with declining staff levels. (*Calculation: 41.6 hours x 12 mths. = 499.2 hours x \$25 per hour = \$12,480.*)

By using an e-mail notification system to alert designated staff to assignments waiting in their queue, e3 eliminates staff time to log into a system unnecessarily. In addition, the e3.ky.gov and EKOS staff user names and passwords are the same.

Tracking Unemployment Insurance claimants' refusal of job interviews could impact the state's UI Trust Fund positively if it provides justification for reversing monetary eligibility for benefits. This feature has not yet produced monetary results and is not intended for punitive use. The first step is to assist claimants with their job search and keep them on track toward gainful employment via case-management intervention.

Non-Financial Return on Investment:

e3.ky.gov has consistently received positive feedback from users and staff. Employers like the system and appreciate the no-cost services and 24/7 availability. According to Web Trends reports, e3.ky.gov has received approximately 1.4 million hits per month

OET/LWIA managers have on-demand access to work queues displaying their offices status on employer registrations and job post processing by staff assignment. Late alerts post automatically and documentation of timeliness standards can be printed directly from the work queues. This type of performance documentation previously did not exist.

Because e3.ky.gov is a customer-focused initiative, feedback on user results and successes is often anecdotal and more difficult to measure. As an information tool for economic developers, reports indicate that e3's on-demand information has reduced the time they spend providing educational and workforce information to employers considering location in Kentucky. e3 was instrumental in bringing a new Japanese firm and 15 engineering jobs to Frankfort, the state capital, and newly elected Governor Steve Beshear has encouraged Japanese Business Alliance Council and other employers to use e3.ky.gov for their firms.