

IBM's Smarter Cities Challenge

Philadelphia

Summary report

Philadelphia, Pennsylvania was one of the 24 cities selected to receive a Smarter Cities® Challenge grant from IBM in 2011 as part of IBM's citizenship efforts to build a Smarter Planet™.

During three weeks in October 2011, a team of six IBM experts worked to deliver recommendations on a key challenge identified by Philadelphia Mayor Michael A. Nutter and his senior leadership team: to infuse Philadelphia's existing literacy and workforce training infrastructures with new strategies and create the first human capital management system of its kind in the country.

Challenge: Increasing literacy and employment in Philadelphia

Over the past 50 years, the Philadelphia region has transformed from a manufacturing, banking and insurance center into a leader in health services, higher education, telecommunications and pharmaceuticals. However, many Philadelphians do not have the necessary skills to participate in the city's current and future economy and, if nothing is done to reverse the current trend, Philadelphia will find it hard to compete for good, high-wage jobs, creating a cycle of unemployment and low-wage jobs.

Philadelphia already depends upon a large range of public and private sector organizations to help tackle this challenge transitioning from low literacy, low digital literacy, and insufficient work skills towards full employment. What it lacks however, is the ability to expand these services in order to meet the growing need along with a system that can ensure collaboration, eliminate redundancies and establish a mechanism to recognize the attainment of skills valued by employers.

The solution - Digital On-Ramps (DOR) - will provide Philadelphians with a framework for delivering comprehensive education and workforce training to its youth and adults, using a blended learning approach. Accessible via cloud technologies, DOR will offer access to a range of educational and training tools from basic literacy and math to post-secondary education and employment training. Using a variety of teaching methods, content will be available through a full range of devices and provide "anywhere, anytime, any device" access.

Highlights:

- The IBM team recommends a series of "quick wins" to implement critical functionality in six months or less with the capacity to be scaled to meet long-term goals of DOR, including:
 - Launch an intelligent navigator of content resources with an online interactive guide to help providers or citizens locate courses
 - Appoint a Project Lead for DOR and bring representatives from the education system, workforce development partners and small and medium business members into the initiative.
 - Create a "federated" view of the constituent in the cloud with information coming from multiple environments or providers
 - Implement a virtual computing lab (VCL) leveraging a services provider to ensure a successful initial implementation of an environment for eLearning
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Overall Themes

A variety of challenges and issues relating to the way individuals and organizations collaborate and interact were uncovered and would affect the practical application of DOR - these are grouped under the following four themes:

Learning: One of the biggest challenges for learning is the sheer diversity of Philadelphia's citizens and their range of learning needs. DOR must be able to meet all these needs in a style most effective for each individual learner.

Governance: Governance is essential to the success of DOR - the City and other bodies, public, private and philanthropic, must collaborate effectively and be held accountable through a framework for implementation and a consistent, structured evaluation of the initiative.

Philadelphians: The City must lead efforts to segment the target populations in need, based upon multiple salient characteristics such as age, geography, and skill levels, and develop specific strategies for reaching each segment. This will enable the development of more effective outreach programs, increase program effectiveness, and coordinate across existing silos to optimize demand versus supply for DOR services. The City's actions would inform and enhance the work already being done by individual service providers to segment their constituents, and create a comprehensive, city-wide perspective.

It is also critical for success that DOR comprehensively engages Philadelphia's business community including trade associations, chambers of commerce, business councils and business committees for the arts. Employers are in the best position to define and refine entry level skill requirements, including both "hard" and "soft" skills and to provide strategic insight and resources to develop career pathways for Philadelphians.

Scalability and Sustainability: While sustainability affects the long-term viability of DOR, scalability enables DOR to handle growing amounts of people, providers, programs, and content. In addition to examining new sources of funding DOR should look at strategies to leverage existing dedicated sources of funding.

Top-Priority Recommendations

The City should act on the following recommendations to quickly build momentum and begin implementation of DOR through a series of "quick wins." Each of these will provide DOR with the opportunity to implement critical functionality in six months or less and can be scaled to meet the long-term goals of DOR. It must also develop a comprehensive, integrated strategy to increase literacy and employment across all populations in need.

Learning – Implement an intelligent navigator of content resources with an online interactive guide to help providers or citizens locate courses based on factors such as learning objectives, physical location and preferred learning environment.

Governance – Appoint a Project Lead for DOR and bring representatives from the education system, workforce development partners and small and medium business members into the initiative. Create a web-based catalog of providers and services by following the model of the survey being done for the Mayor's Commission on Literacy to gather information about the providers of literacy programs.

Philadelphians – Create a "federated" view of the constituent in the cloud and build upon the work being done by the School District of Philadelphia and Community College of Philadelphia. Also, segment the population in need and develop tailored strategies for meeting their requirements.

Scalability and Sustainability – Implement a virtual computing lab (VCL) leveraging a services provider to ensure a successful initial implementation of an environment for eLearning.

Conclusion

Mayor Nutter, has expressed an eloquent and uncomplicated vision for the future: "Literacy and workforce development soar in Smart City Philadelphia." While the challenge will be to integrate disparate systems, organizations and objectives intelligently, the good news is that many of the critical pieces are either in place, or well on their way to being realized. The City holds a pivotal role in creating a culture of ongoing information-sharing and collaboration among citizens, service providers and employers. We are confident this report provides a roadmap for moving forward.

For more information

To learn more, send an email to cca@us.ibm.com or visit smartercitieschallenge.org

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