Youth Employment Challenge

An Urban+Digital collaboration with Employment and Social Development Canada and Civic Tech Toronto

Fall 2016
Contents

1. Executive summary.................................................................................................................. 3
2. Challenge design...................................................................................................................... 4
3. Outcomes................................................................................................................................. 6
   3.1. Prototypes.......................................................................................................................... 6
   3.2. Participant outcomes........................................................................................................ 8
   3.3. Learnings about small-scale civic tech challenges......................................................... 10
   3.4. Learnings about supporting participants........................................................................ 12
4. Conclusions and next steps.................................................................................................... 14
Appendix A: Prototype stories...................................................................................................... 16
1. Executive summary

This report documents the design, outcomes and lessons learned from the Youth Employment Challenge (YEC), a collaboration between Urban+Digital and the Employment and Social Development Canada (ESDC) Innovation Lab.

To present the YEC, Urban+Digital worked with Civic Tech Toronto, an all-volunteer community group with over 1,000 members. The group holds weekly “hacknights” where participants collaborate on projects that use technology, data, and design to address public issues. The civic tech movement creates new opportunities for government to engage and collaborate with community.

The YEC was created to inspire the civic tech community to use their skills to prototype ideas about how civic tech can address challenges related to youth employment. Additionally, the challenge was designed to produce learnings about how government can use civic tech to engage and collaborate with communities.

In order to produce learnings and not just prototypes, the challenge was designed differently from many other civic tech challenges and hackathons.

Three significant characteristics that differentiated the YEC were:

- Non-competitive design
- Submission requirements that emphasized process and documentation
- Opportunities for participants to engage directly with subject-matter experts from inside and outside government

Urban+Digital received six submissions to the challenge, each of which met the minimum criteria to share in challenge awards. Several entries went far beyond expectations.

Among other learnings documented in this report, the Youth Employment Challenge demonstrated that:

- The challenge’s non-competitive structure incentivized collaboration between teams.
- The challenge’s emphasis on documentation enabled knowledge sharing.
- Participants appreciated having opportunities for direct contact with subject-matter experts.
- A high level of participant support helped teams get to the finish line.
- In order to maximize knowledge sharing, it is crucial to plan to share all aspects of the challenge.

The YEC sets an important precedent for how government can collaborate with the civic tech community. By documenting learnings produced through the YEC, this report seeks to enable government agencies to pursue other collaborations based on this model in the future.

The Youth Employment Challenge and this final report were developed and delivered by:

Lia Milito, Program Manager, Urban+Digital (lia@urbandigital.ca)
Gabe Sawhney, Executive Director, Urban+Digital (gabe@urbandigital.ca)
2. Challenge design

The Youth Employment Challenge explored how a small-scale challenge could function as a means of engagement and collaboration between government and civic tech communities. Challenge design was guided by several assumptions:

- A non-competitive structure would incentivize collaboration and co-learning among participating teams
- An emphasis on process documentation would create an environment of openness, facilitating knowledge sharing between government and community
- Opportunities for direct contact between participants and subject-matter experts would increase both learning and engagement

Urban+Digital designed and delivered the YEC with a focus on testing these assumptions and generating additional learning. To deliver the YEC, Urban+Digital activities fell into four categories:

**Undertaking challenge promotion and communications**

Because the Youth Employment Challenge used a different design than many other civic tech challenges and hackathons, it was especially important to communicate the unique elements of the challenge to the community. Urban+Digital presented the YEC to the Civic Tech Toronto community through presentations and breakout groups that introduced participants to the challenge’s unique objectives and design. Additionally, Urban+Digital created a challenge [webpage](#), wrote an [article](#) on the Torontoist blog promoting the YEC, and shared those promotional materials on Twitter, LinkedIn, and through the Civic Tech Toronto Slack group.

**Creating and applying a challenge assessment framework**

In consultation with the ESDC Innovation Lab, Urban+Digital created an assessment framework designed to facilitate learning for ESDC and Civic Tech Toronto challenge participants. Specifically, the assessment framework required all submissions to publicly document initial user research and prototype
testing. These requirements were built into the submission criteria in order to ensure that the prototypes were not created in a “black box”. Too often, coding challenges that emphasize product over process lose the significant learnings that can be gained by documenting and sharing the entire process that teams use to build a prototype.

Creating support resources for participants

Because the focus on process documentation is relatively uncommon in hacking challenges, we anticipated that participants would benefit from support designed to guide them through the process. In this vein, Urban+Digital produced support resources for challenge participants. Notably, the support resources included a series of project canvases to help participants think through different project stages. Urban+Digital also provided ongoing support throughout the challenge by communicating with participants through Slack, in person, and by facilitating breakout groups during hacknights.

Facilitating connections between ESDC and Civic Tech Toronto

Urban+Digital arranged for ESDC representatives to visit Civic Tech Toronto hacknights. Vasiliki Bednar, Chair of the Expert Panel on Youth Employment1, visited a hacknight as a presenter, and Peg Lahn of the Innovation Lab visited and participated in a challenge breakout group. We expected that these touchpoints would make the challenge more meaningful to participants, and would help content-area experts gain a first-hand look at the civic tech process.

---

3. Outcomes

3.1. Prototypes

Most of YEC submissions far exceeded expectations in terms of user testing and prototype sophistication. Notably, Bridge and the Employer-Employee Vouching Authenticity Platform conducted excellent user testing, while Neighbour.ly and EmployME prototypes displayed a high level of technical sophistication. All submissions met the minimum criteria established in the challenge assessment framework.

**Bridge**

A curated website that connects user directly with employment resources, such as mentoring opportunities, job banks, inspirational material, and career information.

**Employer-Employee Vouching Authenticity Platform**

A proposed government-managed platform to authenticate relationships and endorsements between employers and employees.

**Neighbour.ly**

A crowdsourced location-based platform for youth to search and filter local job and volunteer opportunities.
**EmployME**

A Facebook Messenger chatbot that helps job seekers find, organize, and research employment opportunities on a platform that youth already use.

**Orton Park Connect**

A co-created community network to help youth in Orton Park share knowledge, keep up with current employability standards, and build motivation to pursue employment.

**Foresight Career Lab**

An interactive activity to help youth make informed choices relating to employment and set achievable long-term goals.
3.2. Participant outcomes

The Youth Employment Challenge drew 16 participants, over 90% of whom were between 18 and 35 years old. Participants’ prior expertise varied widely, including software development, public policy, entrepreneurship, data science, and community organizing.

Based on post-challenge interviews with at least one member of each team, this section identifies key outcomes for participants. Overall, they overwhelmingly enjoyed taking part in the challenge, and said they would be interested in participating in similar challenges in the future.

**Participants gained and practiced new skills**

Participants said that the challenge helped them learn and practice new skills, especially relating to user testing and prototyping. Many participants said they used user research for the first time. Participants reflected on how the challenge helped confirm the value of doing user research, saying “I was really surprised by how much feedback I got when I did the user testing. I thought ‘this website is great and everyone’s going to love it!’ but then I learned that there were problems with it.” Additionally, participants said they used new tech tools and programming languages for the first time.

“I learned how easy it is to do user testing. Why haven’t I done this with everything I’ve made?”

**The challenge deadline helped participants deliver tangible results, overcoming a common frustration in the civic tech community**

The challenge helped teams scope their projects and plan their work in ways that enabled them to achieve a major milestone. Several participants cited a frustration with other community projects that begin with a great deal of energy, but either fizzle
out or continue indefinitely without tangible goals, milestones, or deliverables. The challenge’s deadline motivated teams to define and reach achievable goals.

“The deadline forced us to make decisions. We could only include very basic functionality, which meant we got it done.”

Participants learned about existing youth employment resources

Through their background research, participants learned about the range of resources currently available to youth seeking employment. Participants generally agreed that existing resources fell short of expectations, leaving ample opportunity for new initiatives.

Participants gained increased self-confidence

Some participants felt that the challenge helped increase their confidence. One participant who formerly owned a business said the challenge helped them feel entrepreneurial again. Additionally, participants developed confidence in their own capacities to use tech tools and design skills.

“I learned that I could make a website in weeks -- I’ve never done that before and it wasn’t that hard.”

The challenge encouraged participants to build new relationships

While some participants opted to work alone or with collaborators they already knew, other teams formed between people who did not have prior relationships. Participants commented on the value of expanding their network and working with new people, especially when they brought complementary skills and experiences.
3.3. Learnings about small-scale civic tech challenges

While there are well-known examples of large-scale challenge programs (such as Grand Challenges Canada, and the US federal government’s challenge.gov), there are fewer documented examples of small-scale challenges being used to drive ideation and early prototyping. By running the YEC, Urban+Digital tested validated assumptions about how to meet challenge criteria.

There is demand for civic tech challenges

We were pleased to receive six submissions, as compared to the one to three that we expected. This participation rate validated and exceeded our expectation that the civic tech community is interested in participating in challenges like the YEC. In follow-up interviews, participants confirmed their interest in participating in other civic tech challenges in the future. One participant said, “I really enjoyed it. I liked it a lot. I would do it again, for sure. I really liked this kind of directed project with a real end and some parameters.” Another shared that participating in the YEC was the highlight of their month.

The non-competitive structure incentivized collaboration between challenge teams

In order to retain the open and community-based nature at Civic Tech Toronto hacknights, the YEC was non-competitive, meaning that every team that met the minimum criteria shared in the award. As a result of this structure, teams were more likely to share knowledge and support one another throughout the process. Several participants said that participant roundtables where teams shared their initial concepts and progress were among the most valuable aspects of the challenge. Additionally, participants used Slack and Google Drive to share and pool background research.
The emphasis on documenting process enabled knowledge sharing

Unlike many hackathons and challenges which focus almost exclusively on output, the Youth Employment Challenge elevated process. This made the challenge accessible to participants with a range of technical skill levels. Additionally, the emphasis on documentation meant that the challenge produced artifacts that support knowledge transfer even to those who did not participate directly in the challenge. The focus on process and documentation means that the challenge can serve to further a body of knowledge and case studies for civic tech.

The six-week challenge timeline was appropriate

Though some participants suggested that the timeline should have been longer to enable more complete work, most thought that a longer timeline would have simply resulted in projects with a wider scope, not necessarily allowing participants to submit a more functional prototype. Most participants agreed that the six week timeline was appropriate, and were happy with the amount and quality of work they were able to complete within the timeframe.

Because of the focus on knowledge exchange, it is important to plan ahead to share all aspects of the challenge

Prototypes are only a small part of the challenge objectives. In order to have impacts in terms of producing learning and knowledge exchange, it is crucial to plan ahead for sharing context about prototypes, process documentation, and research results. A deliverable which packages prototypes with demos, background, similar products and other context would facilitate even greater knowledge exchange between the civic tech community and government agencies.

Participants appreciated direct contact with subject-matter experts

Participants talked about the value of being able to speak with subject-matter experts throughout the challenge. Meeting with experts helped improve both learning and engagement. By sharing expertise, policymakers built participants’ understanding of the problem context, and their engagement with the community demonstrated that influencers, and policy-makers in government were interested in participants’ work. Several participants noted that a breakout group with a representative from ESDC was the time they really resolved to complete a submission.
3.4. Learnings about supporting participants

A significant factor in the success of the Youth Employment Challenge was the level of support available to participants. Participant support was especially important because the challenge criteria required a level of documentation that was new for some. Participant supports included civic tech project canvases, a channel on the community’s Slack messaging platform, facilitated breakout groups during hacknights, one-on-one support, and facilitated interactions with subject-matter experts.

**Participants preferred to use hacknights for facilitated challenge-wide breakout groups rather than team working time**

We assumed that participants would want to use hacknight breakout sessions for focused work with their teams. However, almost every team said they did most of their work between hacknights anyway and would have preferred to have more structured facilitated workshops during hacknights. Participants were especially interested in more structured support around user research.

**Participants placed an extremely high value on one-on-one contact with challenge organizers**

Participants were able to meet with a challenge organizer at Civic Tech Toronto hacknights over the six weeks, and at any time between hacknights through Slack. Organizers also regularly reached out to participants proactively through Slack. Participants told us that regular access to a challenge organizer was extremely helpful.

**Civic tech project canvases were crucial for participants with less prior experience**

Urban+Digital created optional civic tech project canvases to support participants in working through the challenge stages. The canvases prompted the teams to ask themselves crucial questions to help shape project framing, user research, prototype creation, and prototype testing. As expected, some participants with more confidence or experience opted not to use the optional canvases, but those...
“I found the canvases really helpful. At each stage, they really helped me to figure out what I needed to be doing. This was the first project like this I had ever worked on.”

who did use the canvases (at least half of the teams) reported that they were crucial to enabling them to participate in the challenge. One participant said that they began prototype testing without using the project canvas, but returned to the canvas when they were not getting valuable feedback from the testing. They said that the canvas helped them figure out how to conduct research in a way that would provide valuable insight about the prototype.

Participants used the challenge’s Slack channel less than expected

Participants preferred to collaborate between teams in person rather than in the challenge Slack channel. However, there was general agreement that it was useful to have a Slack channel to keep up with challenge reminders and to share resources. Participants also appreciated proactive communication from the challenge organizers via Slack.
4. Conclusions and next steps

The Youth Engagement Challenge successfully inspired the civic tech community in Toronto to produce and test prototypes addressing youth employment in Canada. The YEC also produced significant learning about how government can use a small-scale to engage and collaborate with the civic tech community. In order to design future challenges that produce both prototypes and learning, government agencies and challenge hosts should keep the following principles in mind:

- A non-competitive design incentivises collaboration
- An emphasis on process documentation facilitates knowledge sharing between government and the community
- Direct contact between participants and subject-matter experts increases both learning and engagement

The Youth Employment Challenge is a great example of how government agencies in Canada can benefit from engaging residents in constructive collaboration. By sponsoring the challenge, ESDC is a leader among governments engaging with the civic tech community. We hope that our experience with the Youth Employment Challenge inspires similar initiatives between government innovators and community organizations, including civic tech groups.

Based on our experience and feedback from participants, the following are practical recommendations for anyone implementing civic tech challenges in the future.

Retain the non-competitive challenge design

The non-competitive challenge design encouraged participants to collaborate and share knowledge throughout the challenge. The high participation rate demonstrates that community members were not motivated by winning a challenge, but rather by having an opportunity to practice civic tech in a meaningful and structured way.

Increase support for process and documentation by running workshops or facilitated breakout groups

Based on participant feedback, we recommend facilitating more workshops or breakout sessions to help participants refine their skills. We originally expected that teams would want to use this time to
work on their submission, but most expressed an interested in facilitated challenge-related workshops during hacknights, especially to support project management, user research, and prototype testing.

**Continue to provide many touch points with organizers and experts**

Teams were very clear that they appreciated the opportunity to speak with project organizers and subject-matter experts. We will aim to include ample time to provide this support in future challenges.

**Focus the challenge on products, not services**

Teams that prototyped services rather than products generally submitted less developed prototypes than others. Service prototyping and testing requires a related, but different process. In order to enable a high degree of focused participant support, we recommend limiting the scope of possible submissions to only include products prototypes.

**Provide case studies and further research resources**

With a few exceptions, teams felt that the challenge expectations were clear, and felt that the project canvases were useful in shaping their work. However, several expressed an interest in seeing more case studies. We recommend providing resources outlining optional further reading, with a specific focus on case studies modeling uncommon prototyping methodologies.

**Produce a prototype package to frame and interpret prototypes**

In order to more effectively facilitate knowledge sharing between the civic tech community and government, we recommend producing a prototype package designed specifically to introduce the prototype background, process, and similar products. While information about all these aspects is available through each team’s submission brief, they are in raw form. A more designed and curated introduction to the prototypes would make the information more accessible and impactful.
Bridge

What

Bridge is a curated website that connects users directly with existing employment resources, such as mentoring opportunities, job banks, inspirational material, and career information.

Why

There are many resources available for youth in Canada who are looking for direction and support in the job hunt. However, resources are not very user-friendly or accessible. Bridge makes existing content available to youth in an appealing and user-friendly website.

Users

Bridge is designed for young adults in grades 10-12 who are struggling to access adequate guidance in terms of career planning. Bridge is not designed specifically for any particular group. However, content geared to specific groups (i.e. indigenous youth, LGBTQ youth etc.) will be available through the site.

Research/testing

Bridge was developed based on user research with three men and three women, ranging in age from 15-29. Initial user research revealed that youth are not looking for more resources, but rather better and easier access to existing resources. The prototype was refined based on testing with four additional youth.
Employer-Employee Vouching Authenticity Platform

What

Employer-Employee Vouching Authenticity Platform proposes a government-run website that validates relationships between youth and their employers, enabling them to vouch for one another. Employers can vouch for soft skills and traits like timeliness and resourcefulness.

Why

Youth under 30 tend to have less work experience and weaker networks to provide employment references. Furthermore, they may not trust privately-owned sites like LinkedIn, who disclose personal data to third parties.

Users

This tool is designed for youth under 30 who have weaker networks for providing employment references. The site is designed to serve employees and employers who seek a reliable means of verifying skill/attribute claims.

Research/testing

Initial user research included surveys with business owners to learn more about their concerns about hiring youth. To test the prototype, the team presented screen mockups to potential users and asked them to share their interpretations of various visual elements.
Neighbour.ly

What
Neighbour.ly provides location-based crowdsourcing and search capabilities for employment and volunteer opportunities for youth on any device.

Why
Youth who are entering the job market may not yet be looking for career-specific jobs, making short commute times a high priority. Furthermore, youth who are seeking to build networks are interested in volunteer opportunities in addition to employment.

Users
Neighbour.ly is designed for un- or underemployed younger job seekers living in cities for whom location is one of the highest priorities when searching for employment.

Research/testing
Neighbour.ly was designed based on survey results from 40 respondents. Respondants validated that location was a high priority, second only to wage. Respondents also validated the assumption that youth search for jobs online, with 85% saying they use online job boards.
Urban+Digital and ESDC Youth Employment Challenge: Prototype stories

EmployME

What

EmployME is a Facebook chatbot that helps streamline the job search on a platform that youth already use. The bot helps the user find and share job postings, reminds them to apply, and helps them do background research in preparation for applications and interviews.

Why

It is very easy to find a job posting on the internet but responding and following up is much more difficult. The lack of “curation” in many job search engines means that users often struggle to manage the research workflow, causing some to lose motivation.

Users

EmployME users include youth who are currently unemployed and who actively use Facebook.

Research/testing

EmployME was designed based on longform interviews with several youth ages 20-28. Interview questions focused on job search and application workflow, trying to identify key pain points in the process. One user identified motivation as a key issue, so the team added reminders to the bot’s functionality.
Orton Park Connect

What

Orton Park Connect’s prototype includes an interactive community mapping exercise designed as a game. The game helps youth work together to build strategies to gain knowledge of current job standards and opportunities.

Why

Youth who live in communities that lack information and communications technology infrastructure are highly impacted by unemployment. These youth struggle to learn about digital resources that allow them to keep up with current employability standards and 21st century employability skills.

Users

Orton Park Connect is designed for youth living in the Orton Park Toronto Community Housing Corporation community who are between the ages of 15 and 22 and are not in employment, education.

Research/testing

Interviews with current Orton Park residents informed the prototype, and it was tested with participants at a Civic Tech Toronto hacknight. The prototype testing helped the team understand what additional parameters and guidance would improve user experience.
Foresight Career Lab

What

Foresight Career Lab is an interactive activity and accompanying website to help youth make informed choices about employment. The prototype is a series of cards that a user sorts to help think through employment preferences and priorities.

Why

Youth often struggle to set long-term achievable goals, due to lack of understanding about themselves and the job market. Employment resources are often band-aid solutions that don’t get to this core problem about self knowledge.

Users

Foresight Career Lab is designed to target high school youth entering the job market for the first time. A secondary market includes older youth who are already working but who are not satisfied with their current industry.

Research/testing

Foresight Career Lab was designed based on interviews with several youth about how they think about and make decisions about their career paths.
Urban+Digital and ESDC Youth Employment Challenge: Prototype stories

**Viewing submissions from restricted networks**

If you are on a network that doesn’t allow access to Google Drive, archived versions of the six submissions are available at this webpage: [http://www.urbandigital.ca/youth-employment-challenge-2016-archive/](http://www.urbandigital.ca/youth-employment-challenge-2016-archive/)