HACKING CHILD WELFARE IN CALIFORNIA: DIGITAL INNOVATION TO BENEFIT CHILDREN AND YOUTH IN FOSTER CARE

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Introduction

Technology has become an essential part of American life, with the proliferation of mobile applications, or "apps", that do everything from maintain our calendar to show us the best route home. For many of us, technology eases life planning while connecting us to the resources we need. For foster youth and families, technology can provide great benefits, especially when it is designed specifically to address their unique needs.

In May 2016, the launch of the first-ever Foster Care Hackathon, hosted by the White House, ushered in a new era for foster care – one in which new policy ideas and technology solutions are welcomed and foster youth and families are invited to help shape tech-mediated innovations. This first-ever hackathon inspired follow-up hackathons and spawned a new partnership between the technology and child welfare sectors that promises to change the experience of foster care in the future. Most recently, in February 2017, the Silicon Valley Hack Foster Care Summit brought this new way of thinking and approaching foster care to California.

This report is designed to reflect the energy of the hackathons held to date, provide a deeper look at what happened at the Silicon Valley Hack Foster Care Summit, provide useful lessons learned, and lay out the opportunity for leveraging it and the upcoming Los Angeles hackathon to advance the care of children in foster care in California and across the nation. Efforts to harness the power of technology to enhance the lives of children and youth in foster care have been percolating for a decade[1] – but, thanks to the infusion of energy and new ideas fostered by the hackathons, such efforts are now gaining traction.

Understanding Hackathons

What Is a Hackathon?

A hackathon brings together a group of coders to work collaboratively to create a new solution from scratch in a short, intense time period, often spurred on by a competitive element. At a hackathon, it is common for people with different backgrounds and skills to form teams that focus on specific problems or ideas. Increasingly, hackathons are being deployed with a public purpose to address social or civic challenges. For instance, civic hacking events organized by Code for America have generated a number of successful apps, such as one that streamlines the Section 8 housing application process in Washington, DC, and another that provides a government budget visualization tool for Asheville, NC.[2]

Why a Hackathon?

By bringing together a mix of people with diverse skills and perspectives, hackathons stimulate creativity and cross-pollinate ideas. The focused, short-sprint approach asks participants to step away from their daily lives to brainstorm, problem-solve, and work together to address real life challenges through the use of technology. Traditionally, hackathons also are unique for their emphasis on using and creating sharable assets.

Foster Care Hackathons

What is a Foster Care Hackathon?

By applying the principles of a hackathon to foster care, organizers aim "to use technology to improve the lives of foster youth and families in the child welfare system" by bringing "together tech leaders, child welfare agencies, foster youth and families to develop solutions that make a meaningful difference."[3] Importantly, in the foster care context, hackathons have been tasked with developing both technology and policy solutions to seemingly intractable challenges.

Launching a Movement

White House Foster Care & Technology Hackathon: May 2016

The first-ever foster care hackathon was hosted by the Obama White House, coming out of conversations between its Office of Science and Technology Policy, the Administration on Children, Youth, and Families, and a nonprofit child welfare technology firm, Think of Us. This two-day interactive event held on the grounds of the White House brought together diverse players in the foster care space along with previously untapped technology professionals. "Hacking" focused on pressing needs such as: Preventing homelessness among former foster youth; Recruiting foster parents; and, Equipping foster youth with their essential life documents.

The event generated energy, momentum, and enthusiasm for technology-based approaches to foster care's challenges and spurred the rapid proliferation of follow-up hackathon events in New York and California, as well as the formation of the Hack Foster Care Coalition.[4]

New York City Foster Care Technology and Policy Hackathon: December 2016

The second foster care hackathon, #HACKNYCFOSTERCARE, was held at the eBay offices in New York City (NYC). The hackathon was organized by the New York Administration for Children's Services (ACS), the New York City Mayor's Office of Tech + Innovation, and Think of Us. In the two-day NYC Hackathon, participants "hacked" policy and technology solutions to key challenges identified in advance of the event, reflecting priority concerns of ACS and needs identified by the ACS Youth Advisory Board, which was deeply involved in planning, context-setting, and leadership of the event. View these presentations **here**. ACS is currently engaged in planning to develop four priority concepts and prototypes that were surfaced at the hackathon.

Illinois Code for the Kids: February 2017

Illinois Institute of Technology teamed up with the Illinois Departments of Children and Family Services and of Innovation and Technology to hold a two-day hackathon that drew on the talent of 75 undergraduate and graduate universities from around the state. The event focused on developing a prototype peer-to-peer platform that can connect foster youth and support their safety.

Bringing the Foster Care Hackathon Opportunity to California

Silicon Valley Hack Foster Care Summit: February 2017

At the end of the White House Hackathon, the Silicon Valley Children's Fund pledged to hold a local hackathon. Designed to engage local technology companies and harness the entrepreneurial spirit of Silicon Valley, the resulting Silicon Valley Hack Foster Care Summit was supported by 13 tech companies[5], the Silicon Valley Leadership Group, and other partners, and was organized by Silicon Valley Children's Fund, TeenForce, Think of Us, DC Design, iFoster, and Santa Clara County Department of Family and Children's Services (DFCS).

Silicon Valley's event drew over 300 participants, including more than 50 foster youth and alumni of foster care, as well as a wide array of tech professionals and child welfare stakeholders. Participants self-selected into a series of "tracks" in order to hack solutions that would benefit children and youth in foster care. These tracks addressed:

- Improving youth access to computers;
- Improving the process for recruiting and onboarding foster families;
- Matching children with suitable homes;
- Supporting youth education needs;
- Enhancing youth career preparation and work experience;
- Reviewing the Think of Us platform;
- Leveraging the Foster America tech fellows program;
- Supporting the health and wellness of children and youth in care;
- Giving youth a voice in court; and,
- Enabling case file analytics.

[View further details **here**.]

In addition, event organizers invested significant time in building partnerships that could improve access to laptops for foster youth as well as preparing youth for technology careers prior to the event. This approach paid off.

Concrete Results in Silicon Valley

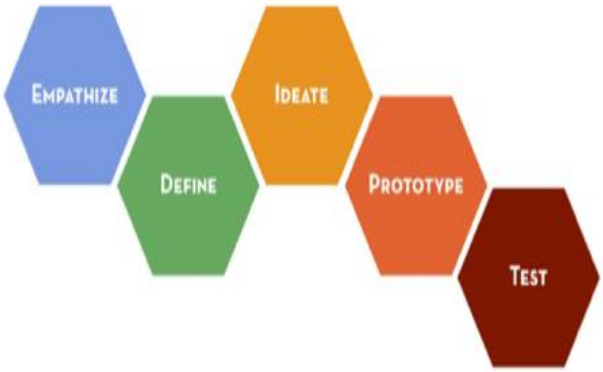
Coming out of the Silicon Valley Hack Foster Care Summit, organizers catalog the following concrete commitments:

- 200 laptops were donated by Ticket to Dream Foundation and 200 donated by Google, as well as more donated by individuals, to be distributed by iFoster and TeenForce;
- Microsoft donated the software required to use all laptops distributed by iFoster;
- A few organizations stepped up to offer paid technology internships to foster youth (at a cost of $2,500 per youth)
- Santa Clara County Department of Family and Children's Services pledged that it will:
  - pilot the Think of Us platform with its Dually Involved Youth unit, in anticipation of making it available for the broader child welfare population,
  - provide 50 laptops to its clients, and
  - ramp up their existing employment training partnership
- County partners have promised to host a re-convening to mark the progress of the activities started by the hackathon.
- Two non-profit foster care tech companies in attendance (Think of Us and Family-Match.org) made a commitment to use the input from their hack tracks to enhance their tools.
- Foster America pledged to tweak its tech fellows program using the input from its hack track, to increase its impact.
- At least two organizations made commitments to develop the ideas from their hacks (specifically, to develop tools for foster parent recruitment using LinkedIn) within their own programs, and others expressed an interest in doing so.
- A continuing planning effort is being organized by a group of participants, which will meet monthly to build these ideas out further.
- Silicon Valley Leadership Group Foundation committed to stay involved in the years ahead, to help support movement forward.

[See the **news** **coverage** to learn more.]

"We can change the world by ensuring that children are nurtured in a positive environment. To do this, we need to listen and be responsive – this is our role as parents, and it is our responsibility as advocates, social workers, and politicians."
– Cindy Chavez, County Supervisor, County of Santa Clara

Design Thinking:



Foster Care Hackathons: A Workforce Development Opportunity

Foster youth earn an average of $690 per month at age 24, which is less than half of the average for their non-foster peers.

Since evidence shows that foster youth who start working during high school have the best earning potential, Silicon Valley Children's Fund and TeenForce have teamed up to bring STEM training (robotics and coding) and paid, professional internship opportunities to 100% of high school foster youth in Santa Clara County.

With that challenge in mind, the Silicon Valley Hack Foster Care Summit aimed to bring in new tech partners and commitments to provide tech work experience to additional foster youth in the community.

In addition to these specific commitments, participants took away new ways of thinking about long-standing problems in the foster care system, having been taught and practiced the principles of design thinking, led by event facilitator DC Design. Design thinking is an approach to planning that begins with soliciting feedback from - and empathizing with - the intended user.

Coming Soon:

Hack Foster Care Los Angeles: April 28-29, 2017

#HACK FOSTERCARE Los Angeles

The Los Angeles County's Department of Children and Family Services and Office of Child Protection, the Pritzker Foster Care Initiative, The Children's Partnership, Think of Us, ScaleLA, and Fostering Media Connections are planning the next California foster care hackathon. It will focus on the several key challenges relevant to children and youth in foster care in Los Angeles County including: recruiting foster parents and resource family homes; transition planning for older foster youth; facilitating communication and connections between social workers, resource families, and children and youth in foster care (and their siblings); and improving the functionality and use of informational and service-related hubs designed to assist social workers, youth, and foster families. It will also feature a day-long hack of legal challenges to data-sharing experienced by county agencies.

A supplement to this report will follow the Los Angeles Hackathon.

What Has Been Accomplished by Foster Care Hackathons, So Far?

The Hackathons Ignited Foster Care Digital Initiatives

Recent foster care hackathons have succeeded in substantially raising the profile of an issue which has been under discussion for a decade: how to leverage the benefits of technology to support the unique needs of this population.[6] Each of the foster care hackathons has generated strong enthusiasm among participants about the opportunity to change the lives of children and youth in foster care. The first event, at the White House, inspired participants to keep the momentum going through the NYC and Silicon Valley events. These, in turn, have generated additional hackathons (such as the one coming up in Los Angeles) as well. The hackathons are the starting point – but, it's the concrete follow-up policy and technology development that will make the difference.

Of course, the benefits of technology cannot be realized by those who do not have access to the Internet -- or to the laptops and smartphones that allow them to use it – a challenge that strongly impacts vulnerable populations like those in foster care.[7] The Silicon Valley hackathon, in particular, raised awareness of this digital divide and has bolstered efforts to reduce the problem.

The Hackathons Have Demonstrated the Benefit of Bringing New Partners to Address Long-Standing Problems

Each of the foster care hackathons has proved the benefit of bringing the tech sector to the conversation about how to improve the lives of children and youth in foster care. Not only did these new tech partners bring new energy and ideas, but they also framed solutions in a new way that led child welfare stakeholders, themselves, to think "out of the box". Hackathons bring together diverse partners to inspire cross-pollination of ideas to solve challenges. In Silicon Valley, this approach was amplified by its emphasis on design thinking. Truly transformative change of the foster care system requires culture change, and envisioning major culture change is easier when exposed to the daylight of other cultures. Foster care hackathons can achieve just that.

For instance, when child welfare agencies think about improving the dependency hearing, they tend to focus significant energy on the role that staff will play. Taking a very different approach, one track at the Silicon Valley hackathon focused on the role a child or youth in care can play, and proposed having the child record a short audio or video clip, at a comfortable time and place of their choosing, for submission to the judge electronically. Using this simple process would give the foster youth a voice in court in a format that could be privately reviewed by the judge, rather than being aired in front of their foster parents or others. While the proposal preserves an important role for the social worker and other advocates; in the hackathon spirit, it "flips the script," increasing the opportunity for a child or youth to advocate for themselves.

The Hackathons Have Proven the Value of Youth Involvement

Increasingly, child welfare agencies recognize the importance of involving youth in efforts that seek to identify solutions to improve the child welfare system. In fact, federal and state laws are building such youth involvement into the legal and funding framework. This shift reflects a growing understanding that children do best when they have a voice in their own care and identify what they need to succeed. Technology offers an opportunity to empower youth to address their own needs, just as the hackathons themselves offer an opportunity to empower youth to develop solutions – as exemplified by the court hack proposal discussed above. Importantly, technology solutions work best when designed in close partnership with

intended users, so that they are responsive to actual needs and desires of the target audience.[8] In all hackathons, youth have served as advisors during the planning phase and as key members of the hack teams.

Hackathons have begun to generate new digital tools:

- From the White House hackathon a venture studio, CoLab, pledged to build the prototype that it had hacked at the event.[9] Since that time, CoLab has worked with the Alliance for Children's Rights to improve KnowB4UGo, a digital resource hub for foster youth in Los Angeles, and hopes to build a centralized database that helps non-profits share data and improve one another's foster youth directories. In addition, coming out of the White House event, the tech firm Salesforce developed a modern child welfare case management tool which includes risk analysis and placement matching, among other capabilities.

- Building on New York City's hackathon, ACS and its partners are pursuing four projects – an emergency support app for youth, a resource clearinghouse, a communication tool to connect foster parents, and improved foster parent application management tool -- reflecting specific prototypes and proposals from the hackathon.

- Finally, just a few weeks out from the Silicon Valley event, we see the following concrete digital tool developments:

  - Santa Clara County will pilot Think of Us with its foster youth, and that tool is being enhanced in response to feedback obtained at the hackathon from the County and other participants.

  - A number of project teams are moving forward to develop their proposals further and pursue real-world implementation.

Learn more about these digital tools, as they develop, at: www.hackfostercare.org

How to Make the Most of This Moment? Next Steps

Building on the hackathons, it is critical that the following steps are taken to ensure the greatest value of these events:

Maintain the Momentum

Use all available channels to get materials out to a wider audience and to continue the conversation in hackathon communities, state-wide, and across the nation. Coverage should raise awareness about the important role technology can play in addressing challenges in the child welfare space, as well as speaking to the concrete outcomes and developments that grow out of these events. The hackfostercare.org site should serve as a central hub of relevant information.

Share, Share, Share

It is essential that the disparate projects that result from these hackathons share ideas, best practices, and even the tools that are developed -- and that each hackathon builds upon the others -- in order to advance this

work most effectively. To do otherwise is to force communities to re-invent the wheel and repeat avoidable mistakes rather than pushing forward to help children and youth. The Silicon Valley planning team is developing a platform to allow such sharing across hackathon digital initiatives, and with outside communities.

Keep New Partners at the Table

New tech partners will look for concrete results as they decide whether to stay involved, as will other partners like foster youth and funders. Hackathons are now tasked with delivering real results to keep new partners engaged.

> *"There is momentum and excitement among the tech community to engage in civic and community action, such as through hack foster care events. The way to maintain this momentum is to show results. The tech community can lend our resources and way of thinking to systemic issues that face not just Los Angeles but the country as a whole."*
>
> *-Taylor McPartland*
> *ScaleLA, LA Hackathon Partner*

Integrate Hackathon Efforts with State Initiatives

California officials must be made aware of opportunities that arise in the course of the hackathons that can advance the numerous major state initiatives that offer an opportunity to achieve statewide scale for solutions identified at the hackathons. A number of state officials from child welfare and technology agencies were in attendance at the Silicon Valley event – a strong first step to ensuring that these efforts are synchronized. Such collaboration must continue.

How Digital Tools Can Help

They can make it easier and more efficient to:

- Connect the care team (foster parents, youth, social workers, judges, and others) to communicate, share information, plan, and track follow up;
- Engage foster youth and give them a voice in their care;
- Make appropriate information, documents, and resources available, when needed, for all parties;
- Reach out to recruit, connect, and work with new partners (such as foster parents and service providers);
- Streamline administrative processes; and
- Gather and analyze data to inform program planning and evaluate outcomes.

Evaluate and Continuously Improve

As demonstration projects are deployed and taken to scale, evaluation and ongoing user feedback must be conducted to ensure that these digital tools are as good as they can be. Evaluation and plans for ongoing improvement are essential to the project's ultimate success. As mentioned above, such lessons must be shared so that other efforts benefit.

Improve Access to Technology and the Internet

The success of foster care digital initiatives hinges on the intended user population having access to hardware and connectivity that support use of the tools. Partners from the technology and philanthropy sectors can help achieve this end, and policy efforts should continue to tackle the digital divide to improve vulnerable populations' access to these increasingly important resources.

> *"The State of California is committed to developing digital tools that improve the lives of children in foster care and facilitate the youth voice. We are pursuing that result through the development of a new, modernized case management system. We look forward to learning from the foster care hackathons, and hope that the best of these efforts can be coordinated to benefit children and youth across the state as well as the public sector workers responsible for their care and protection."*
> *- Kevin Gaines, Digital Service Director, State of California, Child Welfare Digital Services*

California Is Poised for Action

State Initiatives

California is in the midst of planning and developing a new, modern child welfare services system (the CWS-NS). As the new system evolves, innovative ideas, features, and modules generated by hackathons can be folded into its planning. Importantly, the California Department of Social Services is committed to connecting data systems and new members of the wider care team, including potentially foster youth themselves, to the CWS-NS.[10] This is a radical departure from the existing system, opening the door for new solutions and partners. In that vein, California has engaged Code for America in this effort[11], which positions the project well to learn from the foster care hackathons.

Importantly, the CWS-NS is being developed to meet new federal expectations governing Comprehensive Child Welfare Information Systems (CCWIS).[12] CCWIS rules lay out a new way of doing business that push states and local agencies to explore innovative technology solutions that improve data sharing and analysis as well as improving services for children and youth in foster care. The significance of these rules to the hackathons was emphasized by the fact that their release was announced at the White House Foster Care Hackathon.[13]

In addition, California has recently launched a number of other policy and practice changes that demand technology innovation, such as the Continuum of Care Reform, the Core Practice Model, and new laws that require better oversight of psychotropic medications. Building connections across a care team, use of data analytics, and sharing of accurate, timely, comprehensive client-level information are tasks required by these reforms that can be facilitated through technology. Foster care

hackathons are generating prototypes and proposals that would benefit such efforts. It is important that these inform the planning and design thinking at the state level.

County/Local Readiness

California counties have been exploring how to use emerging technology to improve services for child welfare clients for at least a decade, and some have been successful. For instance, among these: Ventura County has enabled cross-sector data sharing between child welfare and health records, giving foster parents a more complete view of the health record for the child in their care, and San Francisco has streamlined and simplified the process for applying to be a substitute caregiver.[14] However, county efforts continue to face culture change, funding, legal, and data-sharing impediments that limit their reach. California counties are eager to benefit from these hackathons through sharable resources, technical assistance, and lessons learned, just as they are eager to benefit from state-wide technology solutions and related practice changes that serve some of their priority goals.

The regional nature of the foster care hackathons allows for a focus on local needs and provides the ability to leverage local resources. For example, the Silicon Valley Hack Foster Care Summit connected the world's most renowned tech community with this new child welfare opportunity and secured an impressive commitment of resources from local tech companies, from free laptops to tech jobs for foster youth. In order to reap the greatest benefit for children in care, these disparate, local efforts must not operate as silos.

Children's Rights Summit: An Additional Resource for California

For the past three years, the law firm Baker & McKenzie has organized a convening of legal advocates, children's advocates, technology experts, and in-house counsel/law firms to engage in cross-cutting discussion about the needs of vulnerable children. Each of these events has solicited pro bono support for challenges that impede efforts to serve these needs, including those that relate specifically to foster care, digital tools, and information sharing. The Summit has generated a pool of legal experts who are ready to offer legal support.

Conclusion

Foster care hackathons offer a chance to address seemingly intractable child welfare challenges by combining fresh thinking and collaboration amongst new partners with solutions afforded by technology. New partners can, and should, help carry the torch – working together with child welfare agencies and other stakeholders to deploy innovation to address the unique experiences of children and youth in foster care.

ABOUT THE CHILDREN'S PARTNERSHIP

The Children's Partnership is a non-profit, advocacy organization that works to improve the lives of children where they live, learn, and play. Since 1993 we have worked to advance the health and wellbeing of underserved children in California and in the country, through meaningful community partnerships, forward-thinking research, and community-informed policy.

Since its inception, TCP has been working to ensure that the benefits of technology reach California's most vulnerable children. This has included working with a number of counties and the State to develop and evaluate electronic processes for sharing critical information about children and youth in foster care among a care team, in order to improve care coordination and service delivery. TCP was also an early leader in efforts to reduce the digital divide. For more information on our foster care-related work, please visit: http://childrenspartnership.org/our-work/foster-care-coordination.

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[1] Beth Morrow, The Children's Partnership, *Electronic Information Exchange: Elements that Matter for Children in Foster Care* (Washington, DC: State Policy Advocacy and Reform Center, January 2013).
[2] http://technical.ly/2015/03/05/10-code-america-civic-hacking-projects-following/
[3] www.hackfostercare.org.
[4] The Hack Foster Care coalition is a network of technology companies, nonprofits, foundations, foster youth alumni, and governmental agencies working together to engage the technology sector to improve outcomes for children and families in the child welfare system. It has three strategic objectives: improve access to technology by providing laptops and Internet access to foster youth, reform the foster youth technology infrastructure, and prepare foster youth for college and careers. The coalition was started by the Walter S. Johnson Foundation and the Anthony and Jeanne Pritzker Foundation.
[5] These included: Microsoft, Adobe, Box, Symantec, Salesforce, iFoster, Think of Us, LinkedIn, Google, IBM, Binti, Foster Care Technologies, and Adoption-Share.
[6] Beth Morrow, The Children's Partnership, *Electronic Information Exchange: Elements that Matter for Children in Foster Care* (Washington, DC: State Policy Advocacy and Reform Center, January 2013).
[7] Eric Lindberg, "Laptop program narrows digital divide for foster youth*," USC School of Social Work News* (Sept. 13, 2016) at https://sowkweb.usc.edu/news/laptop-program-narrows-digital-divide-foster-youth.
[8] Taya Irizarry, Annette DeVito Dabbs, and Christine R. Curran, "Patient Portals and Patient Engagement: A State of the Science Review," *Journal of Medical Internet Research*, Vol. 17, No. 6 (June 2015); Little Hoover Commission, *A Customer-Centric Upgrade for California Government* (Sacramento, CA: Little Hoover Commission, Oct. 2015).
[9] Daniel Heimpel, "A 'Mind Blowing' Experience at the White House Foster Care Hackathon," *Chronicle of Social Change* (May 31, 2016).
[10] https://cwds.ca.gov/index.html.
[11] Dan Hon, Code for America, "A New Approach to Procuring Government Technology in California (Nov. 30, 2015).
[12] These rules can be accessed at: https://www.federalregister.gov/documents/2016/06/02/2016-12509/comprehensive-child-welfare-information-system
[13] White House, Office of the Press Secretary, *Fact Sheet: First Ever White House Foster Care & Technology Hackathon* (May 26, 2016).
[14] For further examples, see: Korey Capozza, Beth Morrow, Sonya Park, *Engaging Foster Youth and Foster Parents in Electronic Records Initiatives: Lessons Learned* (Los Angeles, CA: The Children's Partnership, June 2016).