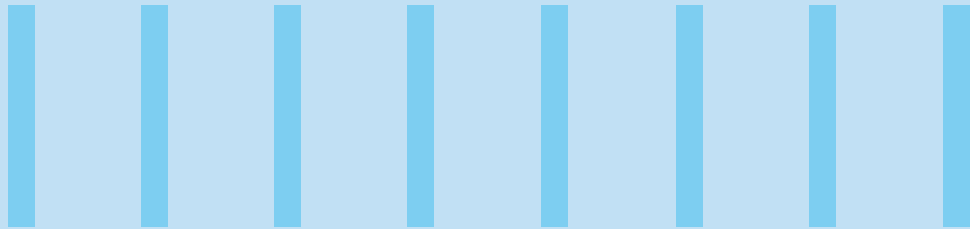




## DIGITIZING CHILD WELFARE SYSTEMS



Beyond the regulatory mandate of providing care and services to the most vulnerable citizens, investments in child welfare enable states to help the children succeed in life and contribute to a more productive society.

System applications used by states for administering their child welfare programs have evolved over time, however, caseworkers and agencies still face many challenges in delivering care and providing services to constituents. These include:

- 1 INCREASING CASELOADS
- 2 STRESSFUL WORK ENVIRONMENT
- 3 HIGH CASEWORKER TURNOVER
- 4 EXTENSIVE TRAVEL AND TIME IN THE FIELD
- 5 DUPLICATE DATA AND REDUNDANT PROCESSES
- 6 LACK OF INFORMATION TO MAKE CRITICAL INFORMED DECISIONS

Digitization of child welfare systems is an opportunity to address many of these challenges and enable agencies and case workers to effectively engage children and families, spend more time with them and improve outcomes.

The Comprehensive Child Welfare Information System (CCWIS) regulation, with its focus on modularity, technology optimization, data governance and interoperability is helping agencies leverage technology to improve child welfare services and achieve better outcomes in terms of permanency and child safety.

When it comes to modernizing the child welfare systems and implementing CCWIS, states can either choose to implement a commercial off the shelf (COTS) product, transfer a solution from another state, or build a solution from the ground up. A hybrid option is another approach – with some modules provided through a COTS solution and the rest custom developed. Each of these options have pros and cons and what works for one state may not be the right fit for another. The strength of the solution and the system integrator are significant factors in the success of any option.

Based on our experience with the implementation of large scale digital transformation programs for our public sector and commercial clients, we recommend that states consider the following characteristics to identify the right child welfare information solution and choose the right implementation approach. These characteristics correspond to the 3 dimensions of the [Design Thinking approach](#) – desirability, viability and feasibility.

## User experience (Desirability)

User experience is of paramount importance in digital transformation. Constituents expectations are being shaped by their experiences with organizations in financial, retail and high-technology sectors. Agency staff and affected families expect the same level of experience when it comes to interactions with child welfare systems. Here are some factors agencies should consider when evaluating a solution for its user experience (desirability):

**Modern and intuitive user interface:** The system should navigate the user through the workflow and functionalities and not the other way round. It should be easy to learn with adequate contextual help, and allow users to save in-progress work.

*An intuitive system (easy to use and easy to learn) also simplifies change management during the new system roll-out and enables faster onboarding of new staff.*

**No duplication of data entry:** Any data / information entered once should be pre-populated at all places where it is required, especially in forms and notices.

**Real-time integration:** The system should ensure that the data from interfacing systems is available at the time a case is processed and/or when a key decision needs to be made. It should also allow routing of tasks and workflows in a cross-functional setting. For example, integration with court systems.

**Mobility:** Any application must have the ability to be rendered on various devices and accessed over internet while on the go.

*Caseworkers spend a significant part of their time on the road. They need the ability to perform some of the application tasks over a phone or a tablet, use their phone camera to capture and upload photos and documents, and conduct a mobile search for information to make the right decision.*



As mobile internet reliability varies across locations, it is also imperative to have offline capabilities for some of the selected functionalities so that caseworkers can save their work while in the field and sync up the information when they are able to get back online.

In addition, some other features like a scrapbook for children and families, more self-service for the families, interfacing agencies, partners and third parties can ensure better community engagement, faster processing and reduced cost.

## Automation and future proof technology (Viability)

The system should be built on the most viable technology that is available today and one that will continue to be relevant over the life of the application. Many agencies are taking a cloud-first or cloud-native approach for design and deployment of their modernized system. This will help in leveraging many modern technologies and enable the seamless integration capabilities available on the cloud, including advanced analytics and AI / Machine Learning.

AI capabilities like advanced analytics, intelligent search, image recognition, robotic process automation, natural language processing and machine learning should be considered as part of the system design as levers for workflow automation, process optimization and improved user experience. These technologies could be used for deep search (person, resources and providers), automation of manual processes, data driven decision making, and determining the risk level of a child or family based on analysis of structured and unstructured data and images.

When it comes to evaluating options between platform customization vs. configuration, ground up development or an industry specific solution, agencies should consider the following:

**Fit-for-purpose:** Is the platform / solution built to address the needs of a Child Welfare system or is it built on top of a platform that was designed for some other purpose?

**Product / solution roadmap alignment:** Does the solution take advantage of emerging technological developments?

**Modularity:** Can the components be easily replaced to leverage better technology or accommodate business process changes?

**Maintainability and total cost of ownership:** Does the design of the system allow it to be maintained easily? Does it require costly niche skills to maintain and enhance the system? Does it lock an agency with a particular vendor for support?

Agencies should choose a solution that can keep up with the expectations of users in a rapidly digitizing world, leveraging latest technologies like cloud, Micro-services, AI, RPA, Blockchain and best practices across multiple Industries.

## Rapid and cost effective implementation (Feasibility)

Even the most desirable and viable solution may not produce the expected level of outcome if the implementation is not done effectively. A solution becomes the most feasible when the following three elements are balanced - schedule or speed of implementation, total cost of ownership and quality.

Listed below are some of the key areas of focus for any large system implementation, specially the child welfare systems:

**Methodology:** Agile is gaining ground as the preferred implementation approach. However, agile implementation requires a high level of collaboration across departments as well as between the system integrator and the various groups within the agency – PMO, Business, Program Areas, QA/

IV&V etc. Agencies should budget adequate effort for staff to participate in the process as well as enough time to orient their teams to the agile methodology. Agile also requires continuous prioritization at every level of the agile team organization. There are certain governance processes and review gates in any large public sector implementation which are not fully aligned with the agile way of delivery. Agencies and SI partners should work collaboratively to define a framework which can align the agile delivery with the governance processes at the state and federal level.

There are various flavors of agile methodologies available today. We suggest using SAFe, which is widely followed and caters to various scales of agile organization – project, program, portfolio etc.

**Quality Management:** It has two aspects (1) quality control (QC), which is about detecting deficiencies in the work product before it moves to the next stage of delivery and (2) quality assurance (QA), which ensures that the right processes exist to prevent deficiencies from occurring and when they occur, detecting them as early as possible. Quality control is achieved through an adequate level of review and testing. In agile methodology, the feedback and testing provides quality feedback in real time as part of each sprint. Quality assurance is addressed through training and enablement, process implementation and process adherence tracking, defect analysis and corrective action planning. In the agile way of working, many of these are addressed during the retrospective and program increment (PI)



planning. The implementation team should continuously strive to detect deficiencies earlier and even prevent them from happening leveraging various 'shift-left' levers like – automated code review, peer review, standards / guidelines / checklists, automated regression testing etc.

**Training and OCM:** The key to successful adoption of any major system is effective training and change management. Users should be engaged early in the process – they should be given preview of the work in progress application and the opportunity to provide feedback right from the requirements and design phase. Well defined planning, a dedicated training environment with adequate technical support, detailed training material and effective training delivery are key to a well prepared implementation team.

Training delivery is also largely digitized these days, thanks to various available training platforms and technologies. Agencies should consider leveraging these technologies. Also, the on-demand computer based training can be integrated with the application, providing contextual help at the time when users need it.

Change management is another important aspect in overall program success. The right level of stakeholder engagement, proactive communication and help for users and staff through the process are all cornerstones of a successful OCM program. Agencies should identify a team with the expertise and experience required to help them navigate through the change process.

**Program management:** It is undoubtedly one of the most important aspects of a successful implementation. Program management integrates various teams, work streams

and processes to ensure that the program delivers the intended outcome. Program management is a vast subject and we will cover key tenets of successful program management in a separate white paper.

## Conclusion

Child welfare services and child welfare program outcomes can be greatly improved with a highly desirable user intuitive and functionally rich platform built on the most viable technologies available today, and implemented using the most feasible approach. We must do our best to ensure that children, our the most vulnerable citizens, get the right level of service and support.

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Jayanta Ghosh has over 20 years of experience in delivering technology solutions for public sector, healthcare and insurance organizations. He has managed large, complex IT programs and service delivery, managed validation for health benefit exchange implementation, and also led the pre-sales team. Currently, he leads program delivery for large system integration in the areas of Child Welfare and Child Support Enhancement. As part of this role, he is responsible for design, development, implementation, support and quality assurance of Child Welfare Information systems and Child Support Enhancement systems.

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