The value of smarter social services

Making a quantitative business case for transforming service delivery in challenging times
Faced with the demand to deliver better outcomes with increasingly restricted resources, many social organizations are finding that the answer to this challenge is to work smarter – by transforming the way they do business and modernizing their IT systems. Our roadmap to smarter social services helps social organizations focus on the capabilities that can improve service delivery and focus on outcomes through incremental investment. New research, including detailed econometric analysis, indicates a compelling business case can be made to support that roadmap, showing measurable returns on investment from projects that enhance service delivery capabilities.

Introduction
Governments around the world are facing daunting economic and social pressures. At every level from local town councils to national administrations, the effort is under way to make better use of limited funds. Social organizations, those that provide services such as income support, pensions, disability programs, employment programs, child protection services or other similar services, are often under increased pressure from politicians and citizens alike. Collectively, these programs often comprise some of the largest portions of a country’s budget, on average 19 percent of GDP for developed countries. The proportion is rising: in 1980, it was only 16 percent, making these programs natural targets for those charged with reducing budget deficits. Added to this is the perceived issue of persistent fraud, waste and error. Even though these losses collectively may only be a small percentage of overall payments, they still represent a significant amount of money and foster a sense of mistrust and poor stewardship.

At the same time, demand for social assistance is rising relentlessly. Clients are asking for higher quality and availability of services. Changing demographics, from aging populations to increasingly disenfranchised homeless populations, are further stretching the services of social organizations. It is within this context of shrinking resources and increasing demands that social organizations must rethink how they provide services if they are going to continue to meet the demands of both their clients and their various constituents from politicians to their staff to advocacy groups.

Most social organizations know they must change how they are delivering services, and some have already started; but it is very difficult to know where to begin. Cost cutting is part of the picture, but the way forward is to become not just leaner, but smarter. By doing so, services can be delivered more efficiently, effectively and responsively.

The key is to leverage information and technology to transform the very nature of social services delivery. But how does one achieve this change? More importantly, is the investment truly worthwhile? To answer these questions, social organizations need to both understand the necessary transformation steps and be able to quantify the gains that those initiatives can produce.

This paper outlines our response to both of those questions as a starting point to help define service delivery transformation for your organization. We first describe the roadmap and the capabilities required to deliver smarter social services. This journey will be different for every organization, but the capabilities required are relatively common for all organizations. We then summarize global research which suggests that the potential for cost savings and service improvements from transformation projects is considerable. Moreover, these returns can scale readily to organizations of all sizes. The potential financial return on investment in smarter social services could range from several million dollars for state or regional agencies to billions at the national level, with significant ROI and rapid payback. With pressure mounting from all sides from clients, staff and political masters and the payback from smart investments clearly measurable, the time to act is now.
What's the overall potential?

Detailed modeling of two hypothetical agencies – a large US state unemployment insurance agency and a large EU national social services agency – estimates that over five years, a program of investment in smarter social services could yield:

**State**
- Total investment: US$102 million
- Total returns: US$754 million
- 5-year ROI: 637%
- Payback: 20 months
- Net present value savings: US$432 million over five years

**National**
- Total investment: US$1.0 billion
- Total returns: US$5.8 billion
- 5-year ROI: 464%
- Payback: 26 months
- Net present value savings: US$3.1 billion over five years

Figures based on financial modeling of two hypothetical agencies, assuming average operational maturity and investment in a full range of business capabilities. Figures rounded for clarity.

Challenges facing social services organizations today

While many social organizations have made a good start improving their service delivery, complex challenges prevent them from fully realizing the promise of smart social services. Early progress includes the use of online and telephone channels to reserve face-to-face interaction for those times when clients are dealing with complex issues and several organizations have strong evidence of tangible economic returns that have been achieved. Yet progress is difficult and most organizations recognize that they have further to go. The challenges facing social organizations as they strive to continue to improve service delivery include:

**Lack of integration across programs** – many clients receive services from more than one social program. However, these programs are not integrated which, for the client, means filling out multiple forms with the same information, visiting multiple locations, standing in multiple lines, wasting time and repeating their story to multiple case workers. For organizations this means challenges sharing information, tracking performance across programs and often an inability to even know all of the benefits and services a single client is receiving.

**Poor use of cheaper channels** – most social organizations still rely on the most expensive channel to reach their clients: the in-person channel. They can make service delivery both more efficient and more effective by moving certain services and interactions to other channels such as the internet, phone or Interactive Voice Response (IVR). When organizations move lower value activities such as updating addresses or even simple eligibility decisions to less expensive channels, they free up their most valuable resources, their case workers, to focus on the high value work of counselling clients that are the most in need.

**Complex supplier networks** – Increasingly, government organizations are delivering their services through private sector and non-government suppliers. While this extends the reach and expertise of organizations, it also complicates how they collaborate and complicates the processes and systems required to deliver on the transformation initiatives required to improve service delivery.

**Inflexible legacy systems** – Social organizations have some of the oldest computer systems still in operation. This means their existing systems are inflexible, riddled with work-arounds and virtually incapable of implementing any new changes to law, policy or processes. This means legacy systems are not able to support business transformation initiatives and that major system investments are required to support the business process and organizational changes that most social organizations are considering.

While these challenges are daunting, not addressing them is even riskier and can be more expensive than adopting well thought-out, planned transformational investments in capabilities to improve service delivery. The next sections of this paper introduce our vision of smart social services and model, through research and case studies, how the right investments could provide economic returns, as well as qualitative improvements to a social organization’s service delivery capabilities.
A vision of smarter social services

The delivery of smarter social services focuses on making service delivery more efficient, effective and responsive to the needs of clients. Key features of this new way of working include:

- A client-centered approach that provides better access to services and information, services tailored to the needs and preferences of the client and improved focus on outcomes
- More efficient service delivery through the use of optimized channels and back-office reorganization
- Improved use of operational and management information to turn data into actionable information, to target resources better and to reduce waste and error
- Greater collaboration across programs and service providers to create a holistic view of the client and deliver services in the most effective and efficient way
- The ability to demonstrate the value delivered to government and society

In the journey towards smarter social services, organizations typically progress through a series of incremental and complementary steps as they develop their capabilities. These capabilities are shown in Figure 1, which depicts a roadmap to progress from basic data sharing to an organization that collaborates across the entire government ecosystem to target comprehensive social outcomes.

The first few steps of this journey are geared towards adopting a more holistic and client centric approach in the foundations of the organization and to improve the quality of information. These capabilities can generate significant value and provide the foundation for additional initiatives that use information and insight to help drive improvements in the quality of services and outcomes.

At the base of any effort to improve social service delivery is improved access to information to help clients get to the services they need more easily through the channel of their choice. Clients can find out everything they need to know including: information relating to themselves, their cases, services available to them and how they are delivered. For the organization, information is collated from multiple sources and is made available to caseworkers, providing improved client-centric decision support. This step offers opportunities to make service delivery more effective and efficient; for example, supplementing processes with greater levels of self-service.

Building on that capability, a single view of the client integrates data across programs and organizations, improving the quality of information helping to provide a comprehensive view of the client’s circumstances by eliminating duplication,
errors and gaps. Data from many source systems is managed more effectively to create trusted information that can be used with more confidence by multiple applications and users. Client information is digitized and matched, taking into account restrictions in place related to the sharing of personal data. The resulting 360-degree view of the client is critical to establish a client-centric approach, as well as reducing errors and duplication.

Next, enterprise case management provides flexible systems that support a client-focused and collaborative approach to delivering social services. By pooling information and adopting a unified case management approach, caseworkers and other professionals across programs and organizations can work with clients to define and meet their needs. The successful achievement of this capability requires an extensive transformation of an organization's people, processes and technology. When adopted throughout an organization, enterprise case management solutions can facilitate business process standardization, automation and consolidation, enhancing caseworker productivity.

As the journey to smarter social services unfolds, organizations gain the ability to allocate resources in an optimal way by using the foundational capabilities created in the earlier steps. An integrated approach to fighting fraud, abuse and error builds upon these earlier stages to help deliver the correct benefits to the right people. It uses enhanced information, analytical tools and improved business processes to help proactively identify the potential for fraud, abuse and error in an organization. This allows limited investigation resources to be more effectively focused on higher-risk cases, as well as to change business processes and rules to prevent the loss of precious resources due to error. By using analytics to target fraud, abuse and error, social organizations can become even better stewards of the resources entrusted to them.

Once organizations master their business processes, they can be in a position to adopt an integrated approach for improved outcomes. At this stage, social organizations can take full advantage of the wealth of information locked in the years of data they have maintained. This transformational capability focuses on using powerful analytical techniques, including processing more information (both structured and unstructured) from more sources, data mining, pattern recognition, predictive analytics and enhanced reporting. These techniques are used to build analytics models that improve service delivery processes to help them target the right services at the right client at the right time. By better understanding the impact of actions on each client, organizations can target their program resources more effectively and efficiently. The potential gains through such an approach can be considerable compared with traditional service delivery that can rely on unevenly distributed human expertise only.

The earlier steps along the journey culminate in integrated service delivery, in which outcomes are optimized across a broader community of government departments and agencies, private and voluntary sector organizations. The social services organization gains the flexibility to respond to changing demands through continuous improvement in client satisfaction, service effectiveness, and operational efficiency that, ultimately, can produce better social outcomes. The organization achieves this by enhancing its own capabilities to optimize operations and to collaborate effectively with a network of suppliers, stakeholders, and clients.

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**How we put a value on “smart”**

The information and projections contained in this paper are based on research conducted by the IBM Center for Applied Insights among government and social services leaders around the world. Case studies of 12 senior managers with recent direct experience of social services transformation were conducted to estimate potential economic returns. The team supplemented this primary research with data from academic resources, industry publications and direct engagement with top researchers.

The model for smarter social services investment that emerged from this research, along with the hypothetical value projections, is designed to help agencies gauge their potential returns from their own, similar investments. The model can be scaled for different industry segments and maturity profiles to help produce individually tailored results that could be applicable to your organization.
How the journey progresses
The depiction of the journey towards smarter social services implies that capabilities are built in an orderly, step-by-step progression. Indeed, there is value in proceeding according to the capability roadmap, due to synergistic effects—the more advanced capabilities build on, and enhance, the value of earlier investments, accelerating return as shown in Figure 2.

In practice, however, the development path is likely to be more complex. Organizations build initial capabilities in some areas for part of the organization, while perhaps adding other capabilities elsewhere in parallel. Initiatives may also occur in a different sequence—for example, addressing improper payments before achieving a single view of client information.

The research that underlies this paper shows that many organizations recognize the value of building these capabilities and have plans in place to do so. Further, several organizations have made good progress developing these capabilities. However, these changes are complex and difficult. In light of today's tight budget constraints, it is becoming increasingly difficult to argue the case for investment in modernization initiatives. Therefore, any investment proposal needs to be supported by a business case showing investment returns.

A shifting spectrum of returns
Any investment in capabilities to become a smarter social services organization will generate different types of returns for the organization, its clients and other stakeholders. For example, implementing enterprise case management drives operational efficiencies for the organization, but also improves levels of service for clients. To optimize investment strategies it is important to look at how investments in the roadmap generate value in different ways for the organization. Four distinct categories of economic return are identified, as shown in Figure 3:

- **Reduce costs**: Savings can be achieved across all operating cost categories, including staff, IT, premises and administration, without reducing output.
- **Improve efficiency and productivity**: Increasing staff productivity can lead to savings in operating costs and/or improvements in outputs with existing staff levels.
- **Improve payment accuracy**: Getting the right payments to the right people by reducing fraud, abuse and improper payments helps make the best use of limited funds.
- **Improve program economic impact**: Ultimately, the goal of social services is to create improved outcomes for clients such as sustainable employment. Doing so will have a positive economic impact for the social organization (e.g., by reducing benefit payments), as well as for Government and society (e.g., by increasing the tax base).

![Figure 2: The financial returns achievable at each stage of the capability roadmap, based on the results of modeling a hypothetical large U.S. state unemployment insurance agency.](image)
Cost reductions along with productivity and efficiency improvements can help make better use of operating budgets (43 percent of the total financial return) while improved payment accuracy and increased program economic impact reduce payments to clients (57 percent of the overall return). These two aspects of social services are usually treated differently for budgetary purposes and are accounted for in different ways. Typically managers in a social services organization are accountable only for operating costs – those they can influence and, to a certain extent, control. However, reducing program costs produces real economic value that should be included in any business case.

The research also explains how for the hypothetical agency, each of the different types of economic return shown in Figure 3 deliver value through the different steps on the roadmap. The returns identified are the estimated recurring annual returns after full implementation of all capabilities, which with this example is estimated to take five years.

Reduce costs

In this example, most cost reduction comes from investments in the earlier stages of the roadmap – improved access to information and enterprise case management. For example, routing client interactions through more automated channels and increasing the levels of self service can lead to large savings through back-office reorganization. These savings might include the creation of contact centers and a reduction in the number of premises.

Several social services organizations have achieved significant cost savings. For example, the Virginia Employment Commission was able to save US$821,000 in operational costs on a US$250,000 system that enabled clients to enter unemployment insurance information online. In another instance, for a UK government department, savings were potentially as much as 45 percent of the total cost of administering transactions, mainly through major restructuring and “e-enablement” of back-office processes.
**Improve efficiency and productivity**

As better and more targeted information relating to a client is presented to caseworkers, core functions can be performed quicker and better. Staff spends less of its time reconciling and checking data and can focus on improving client service and outcomes.

For example, in 2008 the US Social Security Administration introduced iClaim, a streamlined internet application for retirement claims. According to one report SSA claims representatives save approximately twelve minutes handling an iClaim retirement application online, compared with walk-in and phone-in claims.

**Estimated annual return:**

**US$76 million**

23% of total economic returns for the hypothetical state agency

- Improved information access
- Single view of the client
- Enterprise case management
- Improved outcomes
- Integrated service delivery

Figures rounded for clarity.

**Improve payment accuracy**

With a more robust information platform, record duplication and information gaps can be identified, thereby reducing improper payments. There is a strong preventative element as well—fraud can be deterred if it is known that social services organizations are better able to identify it.

Some improvements actually lead to an increase in program costs. For example, the hypothetical example estimates that integrated enterprise case management will lead to a net increase in payments of US$2.7 million, as improved outreach and client-centered information identifies unclaimed benefits. But cost increases linked to achievement of policy goals should be welcomed as predictability of service delivery is enhanced, as well as social outcomes.

This increased use of funds can be offset by savings related to payment accuracy through an integrated approach to fighting fraud, abuse and error. Improved analytical tools can mine claimant data and help identify cases where fraud is more likely and investigations will be more effective.

**Estimated annual return:**

**US$91 million**

28% of total economic returns for the hypothetical state agency*

- Single view of the client
- Fraud, abuse and error prevention
- Integrated service delivery

Figures rounded for clarity.

*Total results reflect outflows of US$0.2 million from improved information access and US$2.8 million from enterprise case management. These reductions indicate payments made to qualified individuals who would not otherwise have received them.
**Improve program economic impact**

With improved analytical tools, it is possible to better understand how interventions can lead to improved client outcomes and target resources accordingly. Specific improvements, such as getting people into jobs quicker and for longer, can lead to substantial savings in annual payments. More effective service delivery which can reduce the duration of the intervention can also save resources. There is also the opportunity to increase accountability; those responsible for service delivery can be measured and incented based on achieving goals. This can also lead to improvements in efficiency, for example, through outcomes-based commissioning and contracting.

Our research has uncovered considerable enthusiasm among social organizations seeking to make progress in this area. For example, in Illinois, adoptions rose by 94 percent through using incentives. According to a recent analysis of performance-based contracting in Canada, “All of the case examples examined demonstrate increased contractor interest and concern with performance; some of the results noted are quite remarkable.”

**Different organizations, different profiles of return**

The scale and profile of returns will vary by agency and are dependent on a large number of factors. These include organization size and complexity, the type of social programs that they administer and whether they operate at national, state/regional or local levels. The returns will also depend on the progress towards smarter social services capabilities that the organization has already made.

The econometric model that yielded the financial gains cited in this paper has been built to account for these variables. A comparable view of potential economic returns can be modeled for any social services organization, from any country and of any size. For example, Figure 4 shows the results for two very different types of organizations. The first is the unemployment insurance agency from a large U.S. state modeled here. The second is a much larger EU national organization with responsibility for several programs including employment, income support, old age and disability pensions, and child support payments.

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**Estimated annual return:**

**US$95 million**

29% of total economic returns for the hypothetical state agency

**Comparison of estimated returns for two agencies**

**State Unemployment Insurance Agency**
- $4.4 billion payments
- $285 million operating costs
- 1,800 employees

**National Social Services Agency:** employment, income support, pensions, disability and child support
- $220 billion payments
- $5 billion operation costs
- 100,000 employees

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*Figure 4: Investments for the two hypothetical agencies produce returns that vary in both scale and nature.*
The scale of economic returns can be quite different, as is the distribution between different types. The national agency’s returns would likely be lower as a percentage of operating costs and benefit payments largely because of scaling and complexity factors. In addition, that same agency would realize a smaller percentage of the savings through improvement of payment accuracy, while a much larger share of the gain would be achieved through improved program economic impact.

These differences would be explained by the relative development level of the two agencies. For example, the hypothetical national organization had made more progress in implementing some of the foundational capabilities and had already implemented a number of innovations to tackle improper payments.

By providing insight into the economic returns potentially available from building different capabilities, this model can help social services organizations and policy makers decide which areas are worthy of particular focus. This can be the starting point to prepare a more detailed business case that can help guide decision makers and stakeholders in their investment strategy.

**The whole story is more than numbers**
While the financial returns of smarter social services transformation to the organization are essential to making the business case for investment, the new capabilities could also produce significant returns to other stakeholders that are difficult to quantify in monetary terms:

- Existing clients become more satisfied thanks to less wasted time, better customer care, faster payments, services more tailored to their circumstances and an increased level of engagement in the service delivery process.
- Employee satisfaction increases because of reduced administrative workload, improved analytical tools and a greater focus on helping the clients that are most in need.
- The public perception of the organization could be improved through reduced waste, fraud and error, fostering greater trust both in the organization and the government as a whole.
- Smarter social services can also benefit a broad range of constituents beyond the organization and its clients. Employers benefit from reduced administrative burden and a growth in the availability and employability of those previously unemployed.

These valuable improvements should form an important part of any business case.

**How can we get you started?**
Your journey toward smart social services and improved service delivery capabilities will have its own distinct character. The research that lies behind this paper can be applied to your organization, helping you to model potential returns of transformation and charting a course to help get you there.

If you would like to continue the conversation about how and where you can start, we invite you to contact one of the authors.

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About the IBM Center for Applied Insights
The IBM Center for Applied Insights integrates deep industry and analytical expertise to chart the course to new value for clients. The Center develops research and tools with pragmatic guidance and tangible outcomes to provoke organizations to action.

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Acknowledgement
We would like to acknowledge the contributions of the IBM teams that worked on this research and modeling

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1 Includes public health expenditure (6 percent of GDP) and pensions (7 percent of GDP). Source: OECD Social Expenditure Database 2010 (SOCX). http://www.oecd.org/document/9/0,3746,en_2649_37419_38141385_1_1_1_37419,00.html.


3 In Europe, the ratio of working-age people to those over 65 is expected to shrink from 4:1 to only 2:1 by 2050. Source: Eurostat. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Population_projections.

4 The model used for the financial results cited in this paper is based on research by the IBM Center for Applied Insight. It is highly dynamic and customizable, and makes a number of assumptions about the sample organization including overall maturity and investments made. The modeling methodology incorporates extensive primary and secondary research including interviews and data from more than 100 industry and academic sources. Individual results for other organization profiles will vary and the model can be tailored to model individual circumstances.


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IBM Center for Applied Insights
IBM Corporation
1 New Orchard Road
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Produced in the United States of America
May 2011
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