Dynamic Social Protection Within the Digital Economy with Solutions from SAP

Table of Contents

<table>
<thead>
<tr>
<th></th>
<th>Dynamic Social Protection</th>
<th>Reimagining with Social Protection Solutions from SAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>The Digital Economy and the Social Protection System</td>
<td>New Opportunities from the Digital Economy</td>
</tr>
<tr>
<td>5</td>
<td>Social Protection Systems Progressing in Line with Economic Development</td>
<td>Reimagining to Create Public Value: Digital Innovation is Real</td>
</tr>
<tr>
<td>6</td>
<td>The Road Map: Steps to Digitizing the Social Ecosystem</td>
<td>Achieving Social and Economic Potential with SAP Software</td>
</tr>
</tbody>
</table>

11 Reimagining the Future for Social Protection
11 Contact
12 Our Commitment to Innovation
The digital economy is changing the way we live and work. Its empowering nature creates opportunities for people to engage in employment models that are based on self-employment, contracting, and short-term labor. While there is extensive debate emerging around the world on what the workforce of the future may look like, there isn’t the same level of discussion regarding the future state of our social protection systems to support this empowered and upwardly mobile workforce.

While the digital economy brings many changes to how we live, we expect work to remain a cornerstone of a functioning state. In return for contributing to society through work, the state provides its workers with various protections against social risks. As the nature of work changes within the digital economy, the solidarity (pooled risk) principle of social protection has the potential to be undermined. Policy makers are facing new challenges as they work to maintain an affordable and adequate social protection system with a fair distribution of risk – within this economy that is transforming to a digital paradigm.

As policy makers and service-delivery organizations work toward more agile and outcome-focused social protection systems within the digital economy, three fundamental priorities emerge for consideration:
• Promoting inclusiveness
• Extending coverage
• Maintaining the social safety net

These issues are similar to the challenges of the predigital economic environment, as the digital revolution does not change the fundamentals of social protection. Rather, the digital economy offers new approaches for addressing the challenges of adequacy, coverage, and affordability. We are entering a new era of dynamic social protection where digital technology enables new levels of policy and service-delivery agility to keep pace with the rapid changes in the labor market. Dynamic social protection heralds a new wave of innovation in deep cross-program policy analysis, through to predictive service interventions, and real-time program evaluations based on digitized data.

Based on our experiences partnering with social protection agencies around the world, we have a unique perspective to enable dynamic social protection systems aligned to national and regional economic and social goals.

How do we get there? In this paper, we would like to share with you our perspective on digital, dynamic social protection systems, and how you can design your own digital-transformation agenda with our industry solution for social protection.
Dynamic Social Protection

THE DIGITAL ECONOMY AND THE SOCIAL PROTECTION SYSTEM
The digital economy challenges us and creates new opportunities for the social protection system in three dimensions:

• Being inclusive for individuals engaging both inside and outside the digital economy
• Providing coverage for excluded populations such as (legal) migrants and people operating outside of the formal economy through legitimate circumstances (such as people in rural and remote areas in developing countries) who may or may not be engaging in the digital economy
• Continuing to provide a social safety net for people and their dependents participating in traditional labor markets and for those moving into the digital economy

Coverage for People Engaging in the Digital Economy
Digital disruption is creating new employment models such as the business models of companies like Uber and Airbnb, which empower people to operate outside of traditional employment patterns. Permanent and full-time employment models are being replaced with more casual arrangements where people seek orders from digital aggregators like Uber. Digital technologies are empowering workers in the informal sector, who can now produce goods and services and reach out to markets around the world or within their communities.

These new business models put people at risk of falling outside the social safety net as risk is transferred to the individual. This empowerment and lift in living standards for millions of people around the world is to be welcomed and encouraged. However, society will let these people down if the social protection system does not keep pace with the new employment paradigm enabled by the digital economy. As incomes rise, people need protection against the social risks of age, disability and labor accidents, health concerns, unemployment, and family responsibilities.

Reaching Out to Excluded Populations
The digital economy opens up new opportunities for governments to provide social protection to those often excluded from the system, such as self-employed people and migrant workers. Taking this opportunity is essential as the digital economy gives rise to new and disruptive employment models. The formal employment sector, as we know it today, may never be the same again, and migrant workers and the self-employed are at risk of being excluded and exploited. The social protection system needs to be dynamic in how it responds to ensure coverage expands to provide a level of protection in line with the International Labour Organization’s (ILO’s) Social Protection Floor initiative.¹

Continuing the Safety Net
Maintaining and expanding the existing social safety net while meeting the well-known challenges of aging populations, expanding coverage, raising the adequacy of benefits, and financing (public and/or private options) is a priority for governments. While there will be significant social and economic transformation as a result of the digital economy, a majority of people will continue to rely on the standard pillars of the social protection system such as retirement, disability, health, and unemployment social insurance programs.

Digital business models are disruptive. The rules have changed.

The Socially Empowered Citizen – Striking the Right Balance

The impact of the digital economy demands a dynamic approach to social protection. Dynamic social protection in the digital economy is agile, responsive, and inclusive. As the digital economy provides the means for a connected world of commerce and business opportunity, social protection expands hand in hand to ensure people are covered against social risks. The digital economy is giving rise to socially empowered citizens who are:

- Socially and economically participating – Work for those who can work remains at the center of the social model, while those who can’t work are encouraged to socially engage.
- Consuming services anywhere, anytime – Mobile devices such as the smartphone enable new business models where individuals are at the center.
- Benefiting from being naturally connected – There is ready access to their digital information (once they’ve provided consent), which enables service delivery without intervention or human processing.
- Informed of their rights and entitlements – People use networks including peers and people in similar situations to access and consume information.

The Socially Empowered Citizen – Sharing Data and Information

Central to digital disruption is the sharing of personal information between buyers and sellers in the commercial world and governments and citizens in the public sector. Evidence from the commercial sector reveals that, while a small subset of consumers care a lot about privacy, most are more concerned with security. Trading privacy for something in return is valued by a majority of consumers. While this evidence alone does not reflect attitudes toward government-held information, it demonstrates a growing public acceptance of some data sharing as long as the information is secure and value is derived from the exchange.

As we see convergence between commercial and public-sector service-delivery business models through digital government initiatives, community attitudes toward data sharing for public services may follow a similar trend. A cross-pollination of ideas and experiences from different industries is enabling the IT industry to provide business solutions that meet user-experience expectations for the social protection services people consume, while still meeting outcome goals for government economic and social programs.

The Right Response

Social protection systems should make it simple for people to:

- Access and remain connected to the social protection system
- Fulfill their statutory obligations
- Be informed of their rights and entitlements
- Give consent and know when and where their personal information is shared
- Find and access the help they need when faced with social risks
- Trust in the prediction and automatic provisioning of social services based on their circumstances and life events
Making it simple means empowering people to have control and choice over how they interact with the social protection system. This is all contingent on how data relating to people and their circumstances is collected, managed, protected, and analyzed.

**SOCIAL PROTECTION SYSTEMS PROGRESSING IN LINE WITH ECONOMIC DEVELOPMENT**

Social development and economic development are two sides of the same coin. Digital disruption from the digital economy is a challenge to this duopoly as economic development is potentially transformed at a rate faster than the social protection system can keep pace with. The ongoing funding of social protection is potentially threatened as economic development is turbocharged by the digital economy.

**Funding Alert**

For the past century, governments in general have committed to lifting living standards by bringing workers into the formal economy. Inside the formal economy, taxes and social contributions are collected, which in turn funds the social protection system. Digital disruption empowers individuals from the informal sector to become economically active and sell their services and products into local, regional, and even global markets. At the same time, more migrants are looking to improve their lives by seeking opportunities in countries that are leading in the digital economy. Where will the funding for social protection come from in this emerging digital and mobile informal economy?

**Funding shortfalls exert downward pressure** on the state’s capacity to maintain and expand the social protection system. Economic and social developments are closely interlinked, and recent global economic shocks are having a significant impact on the social protection system. The financial crises have reduced government income from taxes and contributions. They have also forced governments to rapidly implement new reforms to pensions, benefit programs, and unemployment programs.

This leaves people potentially excluded from the social protection system, as it will inhibit government initiatives to expand coverage and address adequacy levels.

**Addressing welfare dependency** by finding a balance between policy incentives to engage in paid employment (taxes, labor laws, and minimum wages) while providing an adequate safety net for people experiencing social risk is an ongoing challenge for policy makers. A poorly functioning or poorly funded safety net is itself a barrier to employment. At the same time, a “generous” social safety net may contribute to some form of welfare dependency. This can occur when income support from the state creates disincentives to engage in paid employment.

**WHAT DOES THIS TELL US?**

Social protection models must transform at the same pace as economic models are disrupted – as social and economic development go hand in hand.
Evidence-Based Policy Using Real-Time Data
To get the most out of this new world of digital business, you need real-time data. Finding ways to get real-time data matters more than ever for driving innovation. Real-time data provides the opportunity to reimagine business models based on real insights and evidence to support policy. It’s when you can start to achieve better social outcomes through targeted interventions. It’s when technology works for you, instead of the other way around.

When you analyze large amounts of data from disparate sources in real time, you can:
• Develop targeted policy interventions
• Measure the impact of these interventions
• Manage and change policy levers dynamically to keep programs on track for achieving desired outcomes
• Unify the citizen experience across channels
• Weave together a seamless partner-and-provider ecosystem
• Empower and engage your workforce to make evidence-based decisions

You can begin to reach out to those excluded from the system and make it simple for them to participate – simple to register, simple to contribute, simple to claim entitlements, simple to learn about their rights. Empowering the self-employed, the migrants, the informal sector workers, and the new digital entrepreneurs with knowledge and choices for engaging in social protection coverage will lead to social and economic benefits. Evidence-based policy using real-time, aggregated data from a broad cross-section of sources is what can change individual and societal outcomes.

THE ROAD MAP: STEPS TO DIGITIZING THE SOCIAL ECOSYSTEM

Reimagining
Do you have the right strategy? Do you want a dynamic approach to social protection? Start by reimagining your social protection ecosystem to achieve better social and economic outcomes for people.

Reimagining Social Business Models
Drive innovation in service delivery by naturally connecting the social protection ecosystem.

Through a dynamic risk-based approach and predictive analytic tools, the many factors in the social protection system can virtually operate as one in servicing the needs of individuals and communities.

Reimagining Social Policy
Transform social-policy development by leveraging the data coming from digitized business processes. Empower those who can serve themselves, and target specialist resources to where they are needed and can be most effective.

Reimagining Service Delivery
Provide real-time information to frontline workers so they can make better discretionary decisions, which can lead to more-effective and measurable social and economic outcomes.

We leverage design thinking as our key approach to the reimagining phase.
Platform for Dynamic Social Protection
To reimagine your business, you need to have the right business platform in place. Innovative organizations are investing in digital capabilities that are congruent with their strategies. The right technologies help ensure agility and a rich environment for innovation.

The digital business framework from SAP can enable a digital plan and a digital architecture for social protection organizations to:
1. Deliver outcome-based citizen experiences
2. Facilitate collaboration within the social protection ecosystem to accelerate innovation for better social outcomes
3. Replatform core business processes by bringing together business processes and analytics in real time for more-dynamic, faster, and simpler interventions targeted at the needs of the individual citizen
4. Develop smarter and more-engaged workforces across all employees and service providers
5. Harness data assets including the Internet of Things to drive real-time insights and new social business models

It is not about any one of the five pillars of the digital business framework from SAP, but rather how they all interconnect to drive social and economic outcomes, as seen in Figure 1.

Figure 1: The Digital Core
Reimagining with Social Protection Solutions from SAP

NEW OPPORTUNITIES FROM THE DIGITAL ECONOMY
In a connected world where every agency is becoming a technology agency, smarter services and service-delivery models will refocus citizen engagement on outcomes and blur industry lines.

REIMAGINING TO CREATE PUBLIC VALUE: DIGITAL INNOVATION IS REAL
Based on our collaboration with the industry worldwide, leading social protection agencies are moving quickly in three strategic areas.

Reimagining Social Business Models
In a hyperconnected world, traditional government-to-citizen service-delivery models are being reimagined. Social protection agencies are embracing the social ecosystem, brokering e-marketplaces, and enabling communities to come together.

The role of social protection agencies has already shifted from owning and delivering social programs to managing and coordinating services and support. Digital disruption will take this one step further with the emergence of dynamic social programs.

Digitally empowered citizens will use social networks to connect naturally to services and providers. Technology, including mobile devices, has equipped them to help themselves through self-service and e-commerce. Services will be offered in a predictive manner, tailored to individual needs, and according to risk as circumstantial data is processed in real time to drive business processes.

What has not changed is that the people accessing social programs are still among the most vulnerable members of society, such as migrants, the unemployed, and the elderly. Social protection agencies, therefore, have a role to play in guarding against the exploitation of vulnerable people that could result from the connections they make through social networks and in the digital economy. The government’s role as a trusted digital broker is becoming increasingly important in the era of digital disruption.

Reimagining Social Policy
The one-size-fits-all approach to social policy is being reimagined to address the needs of the “segment of one.” Social protection agencies have always understood that every citizen is unique. They now have the tools to personalize interventions and services in response to individual circumstances.

By combining transactional and analytical systems, agencies can leverage up-to-the-minute citizen information to segment their customer bases to help ensure that the right people receive the right levels of service at the right times. People with the ability to help themselves are empowered to do so through self-service. At the same time, those at risk can be quickly identified for early intervention. Finite program funds and agency resources can be targeted to where they are needed and can be most effective.

Digital government delivers better policies, leading to better social outcomes.²

Supercomputing is also making it possible to **model and simulate** the impact of proposed legislative reform, enabling social protection agencies to **inform and influence** government investments. Hit-or-miss social programs are becoming a thing of the past, as social policy is targeted to address the needs of the most vulnerable members of society and to drive particular behaviors within identified cohorts.

Social programs can be evaluated in real time, leading to **dynamic changes to program design** and policy to help ensure programs achieve their desired outcomes.

**Reimagining Service Delivery**
The user experience is being reimagined to enable self-service citizens to access government services at times and in ways that suit them, and to enable staff to access information and resources through any channel, from any location. “**Digital by default**” is becoming a reality with user interfaces that are not only readily available, but also accessible and even delightful.

The emerging network of networks is enabling social protection staff to connect to and coordinate with their counterparts in other government agencies and third-party providers like never before. From real-time service matching to collaborative planning and coordinated service delivery, the **social ecosystem** is being mobilized around the citizen.

**Big Data** is being aggregated from all sources and applied in real time to optimize decision making. Best-practice support plans and pathways can be formulated and recommended based on individual profile and circumstances. Five-star providers can be identified and engaged based on customer experiences and sentiments.

Advanced analytics capabilities can even enable agencies to make determinations based on preliminary or partial data using a risk-based approach. The question is no longer “can we do it,” but “how do we imagine it.”

Citizens will be supported to **achieve social outcomes** rather than simply receive outputs.

**ACHIEVING SOCIAL AND ECONOMIC POTENTIAL WITH SAP® SOFTWARE**
The **social protection industry solution from SAP** is established, commercial, and off-the-shelf and can be applied to transform and simplify government social protection systems. It facilitates rapid and flexible responses to policy reforms, which enables governments to achieve single views of citizens, providers, and operations and assists citizens in effectively fulfilling their obligations and in realizing their social and economic potentials. As shown in *Figure 2*, our solution will enable government agencies to:

- Empower citizens through digital-by-default and mobile-first delivery capabilities
- Support complex assessments of eligibility and entitlements with a real-time and flexible rules engine
- Support data-driven processes, including risk-based customer segmentation and straight-through processing
- Support case-worker decision making to enable timely, transparent, quality decisions and prevention through early intervention
- Reduce operational costs and enable future cross-agency coordination and natural connections across the social ecosystem
**Business Value**
A predefined, end-to-end, commercial, off-the-shelf business application for social protection – appropriate for all countries and social systems that:
- Is capable of running on multiple channels, in multiple programs, and across multiple agencies
- Enables secure and transparent collaboration among customers, providers, social partners, and agency staff
- Is configurable to incorporate the social policy and service-delivery specifics for individual countries and the full range of social programs
- Is implemented by a systems integration partner or an in-house IT shop, including country or program customizations as required
- Allows processes to be executed manually or automatically – in any combination
- Provides preintegrated management information

**IT Value**
- Business application software from SAP maintained and supported by SAP and based on SAP S/4HANA® our next-generation suite offered exclusively on the SAP HANA® platform used by organizations across the globe and across industries
- The SAP® ecosystem and partners, which accelerate implementation using proven skills and best practices from our ecosystem of implementation partners
- Modular architecture designed to allow a step-wise implementation and a rules-management system
- Scalability and reliability ready to execute social protection programs that provide services to an entire nation

Visit our value map for social protection for an overview of our solution capabilities.

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**Figure 2: Overview of Social Protection Solutions from SAP**

**Ecosystem**
- Collaboration
- Services
- Evaluation

**Enablers**
- Service matching and referral
- Online registration and application
- Self-service, including for changes in circumstances

**Citizen**
- Basic needs
- Well-being
- Opportunity

**Outcomes**
- Collaboration
- Services
- Evaluation

**Fulfillment**
- Assessment
- Planning
- Analytics

**Organization**
- Case coordination and activity management
- Service and provider management
- Investigation and compliance

**Our social protection platform**
- Social-service management
- Channel management
- Decision-service management
- Business intelligence and real-time analytics
- Collection and disbursement
- Data and content management
REIMAGINING THE FUTURE FOR SOCIAL PROTECTION

SAP opened the SAP Institute for Digital Government site in October 2015 as a global think tank to create deep industry thought leadership and applied innovation (proof of concepts and prototypes) in collaboration with clients and partners.

The institute’s research agenda is currently aimed at the social protection industry. It engages in collaboration activities with social protection organizations, partners from industry bodies, academia, and technology companies.

The Institute:
• Accelerates innovation through the application of digital technology and public-sector insights
• Works for the future through applied thought leadership and innovative insights
• Creates and demonstrates public value from digital government initiatives through leveraging technology
• Collaborates and co-innovates with national and global business leaders and industry experts from partner organizations to make digital governments work in their organizational contexts
• Establishes and maintains long-term relationships with customers and partner organizations at an executive level
• Produces thought leadership in digital government through discussion papers and articles, such as “Social Investment in the Digital Era: Improving Social Outcomes Through Predictive Analytics and Managing the Emerging Moral Hazard and Ethical Challenges”3

The institute partners and works with various government and nongovernment organizations to address complex societal problems with digital insights.

Foundation Partners:
• International Social Security Association
• European Social Network
• National Disability Insurance Agency
• Australian National University
• Australian Catholic University

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OUR COMMITMENT TO INNOVATION
With a strong business history and global presence, SAP remains committed to innovation and to providing agile and outcome-focused social protection systems. Social protection solutions from SAP can help you promote inclusiveness, extend coverage, and maintain the social safety net – empowering people to secure their social protection rights as they participate in either traditional labor markets or the digital economy, see Figure 3.

Figure 3: Providing a Solid Foundation

- Global presence and relevance
- LOB focus on social protection
- Readiness for the digital economy
- Innovation leader

• 75,000 employees representing 120 nationalities
• 295,000 customers including 15,800 public-sector organizations
• Operations in 191 countries

- Social protection industry solution from SAP deployed across core business processes in 24 organizations around the world with three deployments underway
- Industry thought leadership through the SAP® Institute for Digital Government
- SAP solutions implemented in more than 400 social protection organizations worldwide

- 80 million business cloud users
- 1.9 million connected businesses
- More than US$800 billion in business-to-business commerce
- More than 97% of mobile devices connected with messaging from SAP

• 2011: SAP HANA® software launched
• 2012: SAP Cloud portfolio launched
• 2014: Business networks from SAP comprising the largest marketplace in the world
• 2015: SAP HANA Cloud Platform
• 2015: SAP S/4HANA® empowering companies to build their digital cores
• 2016: SAP® BW/4HANA next-generation data warehouse

VISION: Help the world run better and improve people’s lives
MISSION: Help our customers run at their best
STRATEGY: Become the premier cloud company powered by SAP HANA