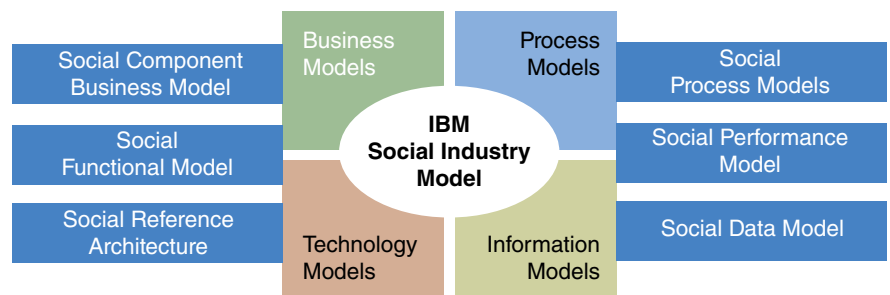




IBM Social Industry Model



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1. Introduction

For 10 years IBM has been exploring the commonalities among social services and social security organizations and programs in countries around the world to help us and our partners develop more powerful solutions for the industry. Through hundreds of projects covering everything from policy and service delivery strategy to the development and support of business applications, we have established a deep understanding of the synergies between programs and across different social systems.

During that time, IBM has also been working on industry models in the insurance, retail and banking industries. In 2005, the IBM Global Social Segment established a research project to explore the potential of an “industry model” for social organizations. In 2007, we started using elements of that research in our new solutions with clients with great success. We have now industrialized what we call the IBM Social Industry Model and are making it available on a wider basis.

This white paper explores industry models and describes the key elements and characteristics of the IBM Social Industry Model and how it can be used to help social organizations define and implement their transformation roadmap.

Martin Duggan
IBM Global Social Segment

Highlights

We believe that the IBM Social Industry Model can bridge the business and IT worlds and lead to more flexible, effective and efficient social organizations.

2. Why do we need an industry model for social services and social security?

Social organizations have a set of common challenges impeding their ability to deliver services. However, too often, each organization tries to solve those challenges alone, duplicating investments and making mistakes others have already made. While there are forums for sharing industry experiences, we have found little structure in that sharing.

Many people understand that social policies are rarely created anew. They are often taken from another country or social system and then modified and implemented. So what may look new in a country has often been implemented somewhere else before. If we were able to capture the thinking that went into these practices and then make them available in a re-usable form, it would allow social organizations to implement them faster and more effectively.

If, at the same time, we could combine these leading practices with innovative business modeling techniques around “componentization” and then align the result with the latest IT architectural thinking, we would bring together policy, business and IT in one consolidated approach.

That is the thinking behind the IBM Social Industry Model, which is:

- A structure and framework for describing good¹ practices gathered from leading implementations around the world;
- The latest business modeling techniques; and
- An aligned Service-Oriented Architecture.

In this chapter, we look at two ends of the spectrum – the high-level business challenges and the promise of increased business flexibility from the IT world of Service-Oriented Architectures. We believe that the IBM Social Industry Model can bridge the business and IT worlds to lead ultimately to more flexible, effective and efficient social organizations.

¹ We refrain from using the word “best” practice because, in this industry, there are often multiple options for implementation that sometimes depend on political ideals.

2.1 Common challenges facing social organizations worldwide

Around the world, social organizations face many of the same challenges, and yet each organization tries to develop its own solutions, answers and policies. Figure 1 describes the challenges many social organizations face. These are often pervasive across programs and countries and drive the need to look more holistically at the problems and the clients than in the past.



Figure 1: Challenges facing social organizations worldwide

These challenges are creating pressures everywhere:

- Programs work in isolation, or even at cross-purposes.
- Introducing new programs takes longer than ever before.
- Citizens, or recipients, are frustrated with service.
- Confidence in government service delivery is eroding.
- Pressure to reduce costs is growing.
- Information technology (IT) systems are constraining the business rather than enabling it.

Highlights

In the last few years, Service-Oriented Architecture (SOA) has emerged as an effective approach to building flexible, re-usable and supportable applications.

Instead of looking at point solutions for each of the problems, we need to start looking at the overall transformation required to become a more flexible and effective service delivery organization. This is where a structured strategic modeling approach excels and is the primary role of an industry model – re-shaping the organization to focus on the business environment and providing the transition roadmap to solving the business challenges.

An industry model should provide the templates, the content and the strategies to solve key business problems. It should redefine the organization from the top down to become more flexible and responsive to change, more effective in achieving outcomes and more efficient in service delivery.

2.2 SOA can help, but it needs better business definitions

Depending on whom you talk to, information technology (IT) has been both the solution and the problem for many of the industry's challenges. There is no doubt it has made processing large amounts of information faster and easier, but many social organizations are now tied up with complex legacy computing systems that no longer meet their needs or cannot be changed fast enough to meet the demands of politicians. IT itself has become part of the problem.

There have been a number of attempts by the software industry to better link business and IT systems, from X/Open and Object-Oriented Programming standards to common language initiatives such as XML. These were often attempts to improve inter-operability and re-use of applications. In the last few years, Service-Oriented Architecture (SOA) has emerged as an effective approach to building flexible, re-usable and supportable applications. Adoption of SOA by social organizations is high.²

² See Blatt and DiMare: "From possibility to actuality: Why social services and social security organizations are turning to SOA," IBM Institute for Business Value.

SOA provides a foundation for building new, and extending old, applications. SOA is typically based on modeling approaches that enforce good disciplines on the organization in defining a business-based service model. But it still requires good business definitions in what is essentially a technical outcome. Today, many SOA projects are IT driven and lack strong business design, modeling and leadership. The IBM Social Industry Model fills that gap by providing the business definitions for SOA implementation.

The IBM Social Industry Model is designed to bridge the gap between business and IT. It brings together experiences from different programs and different social systems. It starts at the highest levels of business definition and logically moves to detailed functional and process specifications.

Highlights

The IBM Social Industry Model provides a detailed set of industry content and tools that can be used to undertake business transformation projects and better define information technology requirements.

3. The IBM Social Industry Model

The IBM Social Industry Model is a consistent set of business and system development models created by IBM to describe the business of a social organization. It provides a detailed and sophisticated set of industry content and tools that can be used by organizations to undertake business transformation projects and better define information technology requirements. This chapter describes the evolution of the IBM Social Industry Model, what the Model is, and the tools we have developed to customize it for social organizations.

3.1 The evolution of the IBM Social Industry Model

In 1999, IBM decided to capitalize on the skills and experience it had gained in the social services and social security market by forming the IBM Global Social Segment as part of its global consulting business. Since then, we have brought together global insight and successful practices from programs and countries worldwide to help organizations learn from each other and implement better solutions while reducing risk and cost for ourselves and the organizations we serve.

In 2005, IBM established a research project to explore the potential of an “industry model” for social organizations. Our research found similarities in social organizations’ approaches to defining high-level processes and establishing mechanisms to protect against social risks. While there are differences between the social systems of each country, and while each

Highlights

Many lessons and experiences can be shared between social organizations within the same systems and between countries if mechanisms exist to promote sharing.

organization has its own unique culture, processes and way of doing business, we found the similarities to be compelling. We concluded that many lessons and experiences can be shared between social organizations within the same systems and between countries if mechanisms existed to promote that sharing. In 2007, we started using elements of that research in our new solutions with clients with great success.

In 2008, we industrialized the research as the IBM Social Industry Model, and our intent is to make this available to social organizations through our solutions and our partners.

3.2 Elements of the IBM Social Industry Model

The IBM Social Industry Model consists of set of business and system development models as described in Figure 2.

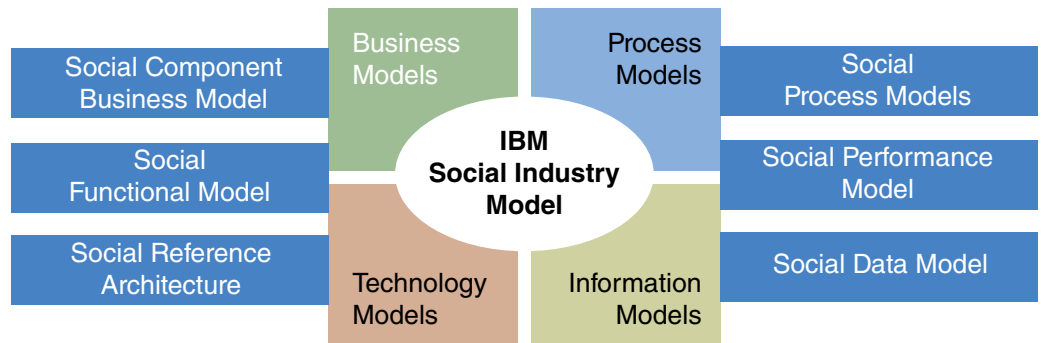


Figure 2: IBM Social Industry Model

Highlights

The Social Component Business Map presents a social organization in a way that cuts through historical program boundaries to show how well the organization's operational capabilities are aligned with its mandate.

The IBM Social Industry Model comprises:

- Social Component Business Map: A way of describing the role of the organization within the social system of a country;
- Social Functional Model: A description of the functions an organization must undertake in fulfilling that role;
- Social Process Models: Process templates that can be used by an organization to describe and design its operations;
- Social Information Models: Business performance management using social key performance indicators (KPIs) and a Social Data Model;
- Social Reference Architecture: A service portfolio and a reference architecture that allow the functions and processes to be externalized and implemented in business solutions for service and benefit delivery; and
- Tools to allow the Model to be customized and implemented to meet the needs of the organization.

Each of the components is described below.

3.2.1 Social Component Business Map

The Social Component Business Map presents a social organization in a way that cuts through historical program boundaries to show how well the organization's operational capabilities are aligned with its mandate. The map can show an entire organization on a single view, and that view can then be used to analyze any number of critical issues facing the organization. Figure 3 (next page) illustrates a full, generic component map of a social organization.


 V3.1 2007	Social Policy	Program Development	Outreach	Relationship Management	Case Management	Program Financial Management	Compliance and Integrity	Business Services
Policy and strategic planning	Policy setting and governance	Policy interpretation and legislation support	Campaign planning	Service provider strategy	Service and case modeling	Collection strategy	Risk universe	Financial strategy
	Partnership and community engagement	Integrated program development		Client engagement strategy		Payment strategy	Compliance and integrity strategy	HR strategy
Oversight and accountability	Outcome evaluation and performance analysis	Product design	Campaign design	Service provider planning, budgeting and monitoring	Case supervision	Program accounting	Compliance and integrity control	Financial management
					Performance and outcome management	Funds management		HR management
					Activity management			IT management
	Strategic reporting	Product administration	Campaign administration	Provider performance management	Appeals	Banking arrangements		
Service delivery	Analysis and forecasting	Product implementation and capability management	Prospect management	Recording, licensing and contracting	Benefit/service eligibility and calculation	Program account reconciliation	Compliance and integrity assessments	Financial delivery
				Intake registration	Benefit/service planning and delivery	Collections	Risk detection, prevention and reporting	HR delivery
	Screening and referral		Performance measurement	Payments		Quality assurance		IT delivery
	Community building		Marketing and advertising	Communications	Banking operations	Remediation		

Figure 3: Social Component Business Map

The Social Component Business Map puts aside organizational considerations to focus on the truly important “chunks” of the business, each of which corresponds to a business component. The components represent generally independent groupings of business activities or functions. The components are organized into a grid, with the columns categorizing the components into competency areas and the rows showing the level of accountability for each component.

Highlights

The Social Component Business Map provides a way to achieve a common representation of a social organization and a framework that ensures consistency and linkage across the business, process, information and technology models.

The Social Component Business Map makes transparent the boundaries of organizational, program and channel silos so alignment of operational processes can be seen. Componentization can help eliminate redundancies, close gaps and improve efficiency and resilience. Once the Model is implemented, a wide range of opportunities and benefits can be seen in multiple areas of the organization, such as:

- *Strategic Planning* – helps prioritize opportunities for optimizing investment, improving service delivery and integrating or collaborating more effectively across program areas.
- *Structural Transformation* – helps structure organizations for increasing flexibility and stability, extracting value from the organizational model and managing cultural transformation.
- *Operational Performance* – helps identify efficiency opportunities, reduce transaction costs, streamline service delivery and create process models.
- *Systems Planning* – facilitates development of an overall IT strategy that unlocks the value of existing investments, builds flexibility and stability, integrates multiple solutions, optimizes IT oversight and assesses the applications portfolio.

The Social Component Business Map has incorporated the experience of many transformation projects so that it can facilitate organizational and structural change. We have designed it leveraging common separation of duties and common inter-organizational operating models³ so that, by following the componentization down into functions, processes and ultimately IT, it truly enables flexibility at the highest level. We have designed in most political and government reorganization changes so that, should a change occur, organizations that have implemented the Model will be able quickly to incorporate that change throughout their business.

³ Inter-organizational operating models might include "Not-for-profits," separate appeals organizations, policy and service delivery separation, private sector operation and others.

The component business map is at the heart of the IBM Social Industry Model, providing both a way to achieve a common representation of a social organization and a framework that ensures consistency and linkage across the business, process, information and technology models.

3.2.2 Social Functional Model

The Social Functional Model contains a functional decomposition of the business of social services and social security. It defines more than 1,000 cohesive business functions, grouped by the business components defined in the Social Component Business Map. Table 1 illustrates a sample of the business functions supporting the Screening and Referral component.⁴

Table 1. Business Function Definition: Screening and Referral		
Level	Name	Description
Component	Screening and referral	The review of client information against a series of services and benefits to determine what is believed to be an appropriate bundle to meet the client needs. This is typically at a stage before a formal case is opened. It may lead to a case being opened but may also lead to referring or signposting the potential client to a different organization for the needs to be addressed. The component, therefore, includes maintenance of resource directories; the processes for making referrals and following up; and operation of the screening processes based on a needs assessment and eligibility review.
Function	Screen recipient needs	Ask the recipient a series of questions to determine his/her needs in order to determine the programs/products that he or she might be eligible for. The function allows the user to locate services/resources by selecting from a list of predefined needs categories and subcategories. It provides questions to aid the user in selecting the appropriate categories based on needs.
Function	Screen for potential eligibility	Apply a set of business rules to available recipient information to assess potential eligibility for programs, benefits and services. The function runs business rules for various programs/products to determine if the recipient is potentially eligible for one or more of them.

⁴ There are some 30 functions defined in the Social Functional Model for the Screening and Referral Component. These are shown for illustrative purposes.

Highlights

The Social Functional Model is the starting template for defining core business requirements and is a static representation of the business, or “what” the organization needs to be able to do to meet its mandate.

The Social Functional Model is based around two dimensions:

- Functions are defined in a cross-program manner.
- Program-Specific Functions – where program-specific functionality is required, this is included in a program-specific representation.

The Social Functional Model helps organizations foster collaboration across programs and between business and IT by using a common vocabulary for the entire organization.

In addition to defining the functional view of a social organization, IBM has started cross-referencing the Social Functional Model against major software products available in the marketplace. The functional scoring shows how well different vendors implement that function in their packages and maps as either:

- Standard functionality in product;
- Feature can be supported by complex configuration;
- Requires a third-party solution;
- Custom programming required; and
- Feature cannot be accommodated.

How this vendor mapping is used is described in Chapter 4.5.

The Social Functional Model is the starting template for defining core business requirements and can be viewed as a static representation of the business, or “what” the organization needs to be able to do to meet its mandate.

3.2.3 Social Process Models

The Social Process Models contain business processes for social services and social security organizations. The processes are mapped to the relevant components of the Social Component Business Map and link to the functions defined in the Social Functions Model so there is an interconnected and consistent framework supporting the principles of componentization incorporated into the overall IBM Social Industry Model. Figure 4 describes the high-level framework for the Social Process Models.

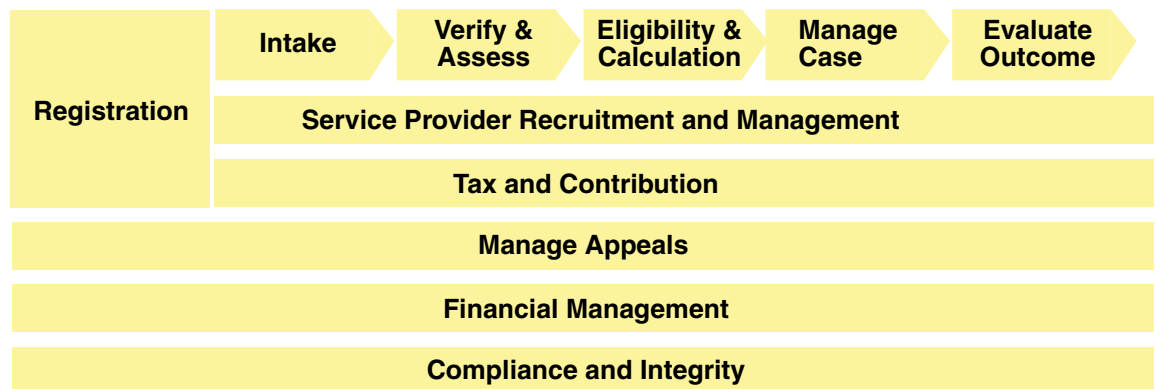


Figure 4: Social Process Models

The Social Process Models include more than 100 industry-based business processes that address areas such as:

- *Registration:* The processes for either joining a social organization, or being accepted as a legitimate claimant. The required action may be as simple as making a contribution through a person’s employer or as complex as a multi-program registration form.
- *Intake:* The processes for applying for a benefit or service. This includes screening and referral processes for reviewing client information against a series of services and benefits to determine what is believed to be an appropriate “bundle” to meet the client’s needs. It also includes processes for connecting a client, provider or partner with another product or provider that helps meet the client’s needs.
- *Verification and Assessment:* The processes for verifying evidence and providing an assessment of whether or not an applicant is entitled to the requested benefit or service.

Highlights

Over 100 process models are included.

- *Eligibility and Calculation:* The processes for determining a client's eligibility for benefits or services under program or organizational policy, and determining the amount of those benefits or services. It also includes the processes for authorizing payment for services and/or benefits.
- *Manage Case:* The processes for selecting the benefits and services offered to clients, for identifying the providers of those benefits and services, and for establishing a plan to monitor the client's progress in achieving program and outcome goals.
- *Evaluate Outcome:* The processes for collecting information about the achievement of individual and program outcomes as well as collecting information about the efficiency and responsiveness of the services and benefits used in achieving those outcomes.
- *Tax and Contributions:* The processes for issuing statements of liability and collecting funds owed to the organization, whether taxes, contributions or debts.
- *Financial Management:* The process by which an organization collects and allocates its funding or receivables. This could include insurance contributions, debts such as overpayment recoveries and/or student loans, and program payments. It could also include the allocation and management of collected funds and financial pools.
- *Manage Appeals:* The processes for tracking the status of appeals as they move through the organization, including their eventual resolution and the required follow-up activity.
- *Evaluate and Manage Service Providers:* The processes for making contacts with potential service providers to carry out a formal process of evaluation and to accredit and contract with service providers. It also includes processes for establishing performance-level agreements and ongoing analysis of service monitoring data to evaluate service provider performance.
- *Compliance and Integrity:* The processes for ensuring that the organization follows applicable laws, regulations, policies, procedures and sound business practices, and to identify, mitigate and manage the organization's exposure to risk.

Like the Social Functional Model, the Social Process Models are defined primarily as cross-program processes with some program specific areas identified. Our aim is to build the processes across programs as often as possible without detracting from the Model's usefulness to individual programs. For some programs, we have included a program-specific guide that assists use of the Model in specific areas.

The Social Process Models help get re-design projects off to a quick start because the pre-analyzed processes are populated with the content required to describe social organizations' operations. An organization not only can compare its own business processes to successful practices, but also can understand how to optimize its processes to support the organization's mandate.

IBM created the Social Process Models to align to the business functions in the Social Functional Model. In the same way the Social Functional Model defines the "what" an organization needs to be able to do, the Social Process Models define the "how" an organization undertakes its mandate. This link between the static view of the Social Component Business Map and its underlying business functions on one hand and the dynamic view of the business processes on the other helps organizations fully define their business model.

Highlights

The Social Performance Model will allow organizations to define KPIs.

3.2.4 Social Information Models

Within the IBM Social Industry Model there are two Social Information Models being developed to provide an overall reference for data in the organization.

1. The Social Performance Model is based on a component-by-component definition of KPIs that social organizations can use to evaluate their performance against their mandate and strategy.
2. The Social Data Model will depict a high-level model of the main data entities needed to support an integrated service delivery approach that revolves around the citizen or recipient, along with known listings of the attributes associated with the entities in the data design.

The core content in the Models is already being used by IBM consultants. However, given IBM's recent acquisitions, we are taking the opportunity to evaluate further integration possibilities. We expect to release the Social Performance Model and Social Data Model in 2009.

3.2.5 Social Reference Architecture for Service and Benefit Delivery

The Social Reference Architecture provides a set of architecture patterns and models for implementing the business design. Figure 5 provides a high-level view of the Social Reference Architecture and focuses on the core service delivery environment.

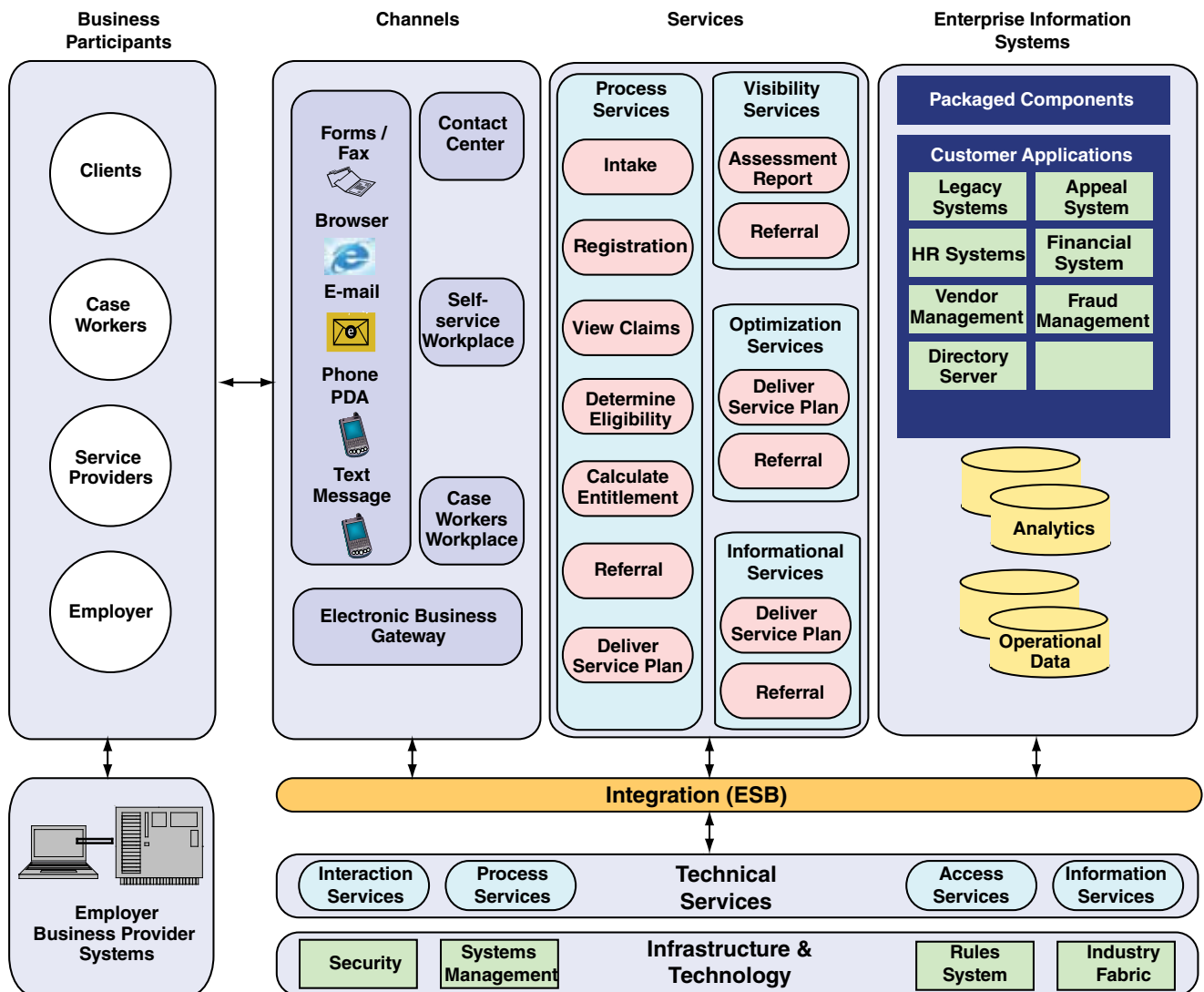


Figure 5: Social Reference Architecture

Highlights

Conceptual elements of the Social

Reference Architecture:

- **Participants and Channels**
- **Services**
- **Enterprise Information Systems**
- **The Enterprise Service**
- **The Technical Services Layer**
- **The Infrastructure Layer**

1. *Participants and Channels*: This provides the link between the users of the application and the system itself, through one or more channels.
2. *Services*: The services layer contains the series of business-related services (Business Application Services) and technical services that are used to enable the business functions of the organization.
3. *Enterprise Information Systems*: The Enterprise Information System contains the applications that can be used to build new business logic, including packaged applications, customer applications, and legacy systems.
4. *The Enterprise Service*: As the core component for integrating key solution components and services of all kinds, it enables and formalizes integration, routing and interactions in a uniform manner.
5. *The Technical Services Layer*: This contains the technical components needed to run the system and to use the business application services in a secure, reliable and efficient way.
6. *The Infrastructure Layer*: Additional applications and services that are used across the business processes.

A more flexible business requires more flexible IT environments. The Social Reference Architecture, which is fully SOA enabled, provides the in-depth guidance to move from the business models defined in the IBM Social Industry Model, to the service model required by a SOA solution design.

To support the Social Reference Architecture, IBM has developed a number of artifacts to link the business definition and underlying technology platform and to provide a reference for designing SOA-based business applications. The following artifacts are available:

- *SOA Service Model*: Provides a set of candidate services to support SOA-based business applications;
- *Architectural Decisions*: Document important decisions about any aspect of the architecture;
- *Architecture Overview Diagram*: Graphically represents the governing ideas and candidate building blocks for SOA-based business applications;
- *Nonfunctional Requirements*: Document major operational and nonfunctional requirements of SOA-based business applications;
- *Principles, Policies and Guidelines*: Define the underlying general rules and guidelines that an organization can use to utilize and deploy all business and IT resources and assets across the enterprise;
- *Standards*: Detail pre-determined standards for SOA-based business applications for both the business and the information technology environment; and
- *Test Strategy*: Defines the test strategy for SOA-based business applications. The strategy document defines common terminology and approaches for testing the integration of various assets and the overall behavior of the solution.

Those artifacts, along with the Model's tools (See 3.3), enable the definition of an SOA that is much more likely to produce a truly reusable service-based infrastructure for a social organization.

3.2.6 Social Business Terms

Clearly defined business terms improve standardization within a company. The more than 100 entries in the Social Business Terms list are grouped in domains and mapped to the Social Industry Model, providing an easy entry point into the models. Many of the entries include synonyms so people can use the terms with which they are most familiar.

Highlights

The IBM Social Industry Model is delivered electronically and includes the IBM Social Industry Model Workbench (for accessing, managing and viewing the Model) and IBM modeling software (for customizing the Model's content).

3.3 Tools to support the IBM Social Industry Model

In order to use the IBM Social Industry Model in an organization, it will need to be tailored and customized to the needs of that organization. There are few organizations in the world that undertake all of the components described in the Social Component Business Map, and even they may not cover the entire scope defined in the Social Functional and Social Process Models. The tools⁵ in the IBM Social Industry Model support its customization to meet the needs of each social organization.

The Model is delivered electronically and includes the IBM Social Industry Model Workbench – for accessing, managing and viewing the Model – and IBM modeling software for customizing the Model's content.

3.3.1 IBM Social Industry Model Workbench

The IBM Social Industry Model includes different models for different purposes, a feature referred to as “separation of concerns.” This allows the different models to be more efficiently tailored to tackle different problems. In order to maintain cohesion and consistency among all the models, it is critical to define a traceability path between models so that changes in one model are reflected in the others.

The IBM Social Industry Model addresses this problem by defining all the models in a common, relational repository where they are mapped to each other. This repository is called the IBM Social Industry Model Workbench and is illustrated in Figure 6. The Workbench is a Web-based application that is used as the common repository for publishing all the models that make up the IBM Social Industry Model, and it ensures traceability across models and the re-use of definitions.

⁵ The IBM Social Industry Model can be delivered and used without the tools if required.

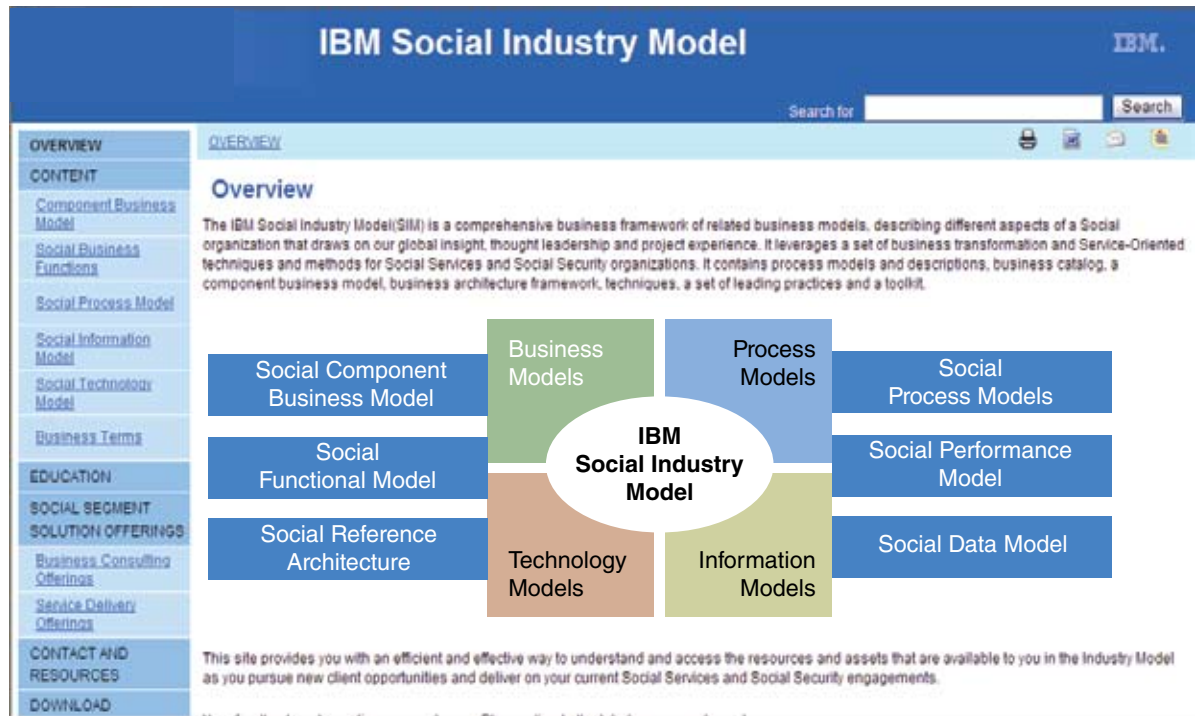


Figure 6: IBM Social Industry Model Workbench

Maintaining all the models in one comprehensive, relational repository provides consistency and significant savings in maintenance time. Users can easily extract information from the models through queries. Traceability from “end-to-end” – from Social Component Business Map to the Social Process Models, and vice versa – increases the efficiency of change management because less time is needed to check that each change is fully reflected throughout the tool as it is used to support a transformation.

3.3.2 Component Business Modeling Tool

The Component Business Modeling (CBM) Tool, depicted in Figure 7, provides a means for accessing and manipulating the Social Component Business Map and its underlying business functions easily and flexibly. It provides the foundational tool to tailor the IBM Social Industry Model to illustrate a social organization's business operations in components containing similar activities.

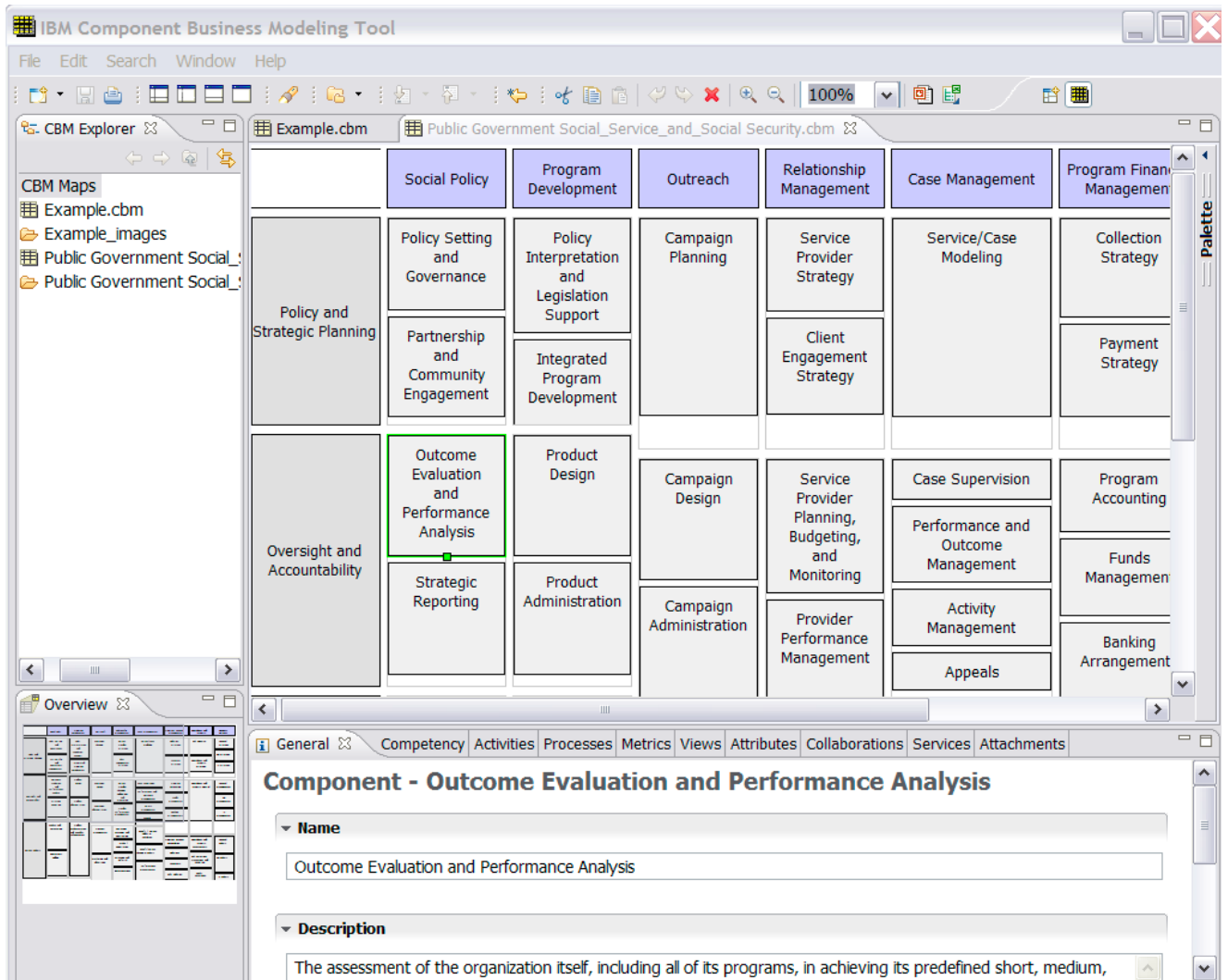


Figure 7: Component Business Modeling Tool

Highlights

The Social Process Models are fully implemented in IBM WebSphere Business Modeler, which provides the ability to integrate details of the future state into a single repository and to represent that future in visual tools.

The CBM tool connects to other business modeling tools that are used to modify the IBM Social Industry Model content, such as the process and technology templates enabling a social organization to associate its organizational processes with its business strategy.

3.3.3 Business Process Modeling Tool

The business process diagrams that make up the Social Process Models can be accessed and viewed in the IBM Social Industry Model Workbench. However, a business process modeling tool is required when tailoring the models to reflect the unique requirements and specific business rules of individual organizations. In the IBM Social Industry Model Workbench, we have chosen to document the processes separately from the process modeling tools to allow organizations flexibility in choosing the right process tool for their needs.

The Social Process Models are fully implemented in IBM WebSphere® Business Modeler. This tool provides the ability to integrate details of the future state into a single repository and to represent that future in visual tools. It also provides reports that facilitate communication of the business process. It has the added benefit of visually simulating processes, and then automating their implementation through connections to enterprise software.

3.3.4 Social Software Assessment Tool

The Social Software Assessment Tool provides organizations with an industry-based business functions mapping tool to determine functional requirements and then test how well legacy applications and solutions in the marketplace meet those functional requirements. The tool is currently in development and scheduled to be released in early 2009. It includes:

- A database containing the Social Functional Model that can be customized to document business functional requirements;
- A mapping of leading software vendors to each function, and a five-level grading of the solution's ability to support the functions;
- A reporting tool to document how marketplace software can meet the social organization's functional requirements; the user can view these results based on overall capabilities or at a more granular level by business component, function set or priority; and
- The ability to map and score legacy functions to the Social Functions Model to determine how well the existing application supports future needs; this leads to architectural design decisions about whether the legacy system has functions that can be retained in an overall solution.

The Social Software Assessment Tool is designed to assist with “buy” versus “build” decisions. It provides the functional assessment capability in that decision, but does not address areas such as non-functional requirements, strategic sourcing decisions or pricing considerations.

Highlights

The content of the IBM Social Industry Model is regularly validated and enriched by social services experts.

4. Using the IBM Social Industry Model

The IBM Social Industry Model provides rich business content for all stages of business design and system development projects. It is a resource to:

- Define overall service delivery strategy and investment prioritization;
- Determine functional requirements;
- Optimize business processes;
- Rationalize application portfolios;
- Help decide whether to “buy” or “build” software and, if “buy”, develop a functional comparison of products; and
- Deliver a design point for an organization’s SOA strategy and solution implementation.

The content of the IBM Social Industry Model is regularly validated and enriched by social services experts. It is designed to be readily accessible to business users. This chapter describes how the IBM Social Industry Model can be used to help define and build flexible and dynamic social organizations.

4.1 Defining strategy and investment prioritization

The Social Component Business Map is customized to create an easily understood representation of a social organization. This can then be used to help define the organizational strategy and investment prioritization. Using the Social Component Business Map, organizations can map out their transformation roadmap and communicate their plans to stakeholders.

The first step is to evaluate each business component and rate the importance to the organization. The second step is to evaluate the capability of the organization to deliver the business component. The resultant mapping shown in Figure 8 is known as a “heat map” and can be used to direct investment prioritization.

 V3.1 2007	Social Policy	Program Development	Outreach	Relationship Management	Case Management	Program Financial Management	Compliance and Integrity	Business Services
Policy and strategic planning	Policy setting and governance	Policy interpretation and legislation support	Campaign planning	Service provider strategy	Service and case modeling	Collection strategy	Risk universe	Financial strategy
	Partnership and community engagement	Integrated program development		Client engagement strategy		Payment strategy	Compliance and integrity strategy	HR strategy
Oversight and accountability	Outcome evaluation and performance analysis	Product design	Campaign design	Service provider planning, budgeting and monitoring	Case supervision	Program accounting	Compliance and integrity control	Financial management
					Performance and outcome management	Funds management		HR management
	Strategic reporting	Product administration	Campaign administration	Provider performance management	Appeals	Banking arrangements		IT management
	Document management	Banking arrangements	IT management					
Service delivery	Analysis and forecasting	Product implementation and capability management	Prospect management	Recording, licensing and contracting	Benefit/service eligibility and calculation	Program account reconciliation	Compliance and integrity assessments	Financial delivery
				Intake registration	Benefit/service planning and delivery	Collections	Risk detection, prevention and reporting	HR delivery
	Community building		Marketing and advertising	Screening and referral	Performance measurement	Payments	Quality assurance	IT delivery
			Communications	Debt collection	Remediation			
			Banking operations	Remediation				

Figure 8: Social Component Business Heat Map

In the example illustrated in Figure 8, the colored areas are areas of priority. The green areas are where current capability is rated as good. The yellow is where incremental improvements are required. The red is where major investments or acquisitions are required.

Highlights

The Social Component Business Map provides the “straw man” that enables an organization to quickly define itself in discrete components to help define strategy and investment prioritization.

There are many other strategic uses for the Social Component Model. IBM has used it to help social organizations undertake mergers by aligning people, functions and resources from both organizations into a new organization. We have used it to create organizational models, and we have used it to help with the strategic alignment of business and IT.

The Social Component Business Map provides the “straw man” that enables an organization to quickly define itself in discrete components to help define strategy and investment prioritization.

4.2 Determining functional requirements

The Social Component Business Map and Social Functional Model provide a basis for rapidly and accurately defining business requirements.

The Social Functional Model gives an organization a starting template of over 1,000 functional definitions. By selecting the appropriate functions, a functional specification can be developed for application software developers or internal or external providers to implement.

These modified functional requirements can be used for many purposes. They can form the basis of an application specification or vendor comparison. They can be used for procurement scoring and even for detailed organizational design.

4.3 Optimizing business processes

Social organizations have traditionally evolved their processes over many years into what is often a complex interwoven environment. Changing processes is complicated and usually involves changes in business, people and IT. IBM has developed the Social Process Models to assist in this complex area because moving to new optimized business processes is a key feature of all transformation projects.

Highlights

Optimizing business processes involves assessing the current “as-is” state and designing the future “to-be” processes.

In many cases, there are variations in the business processes, depending on the program area. For example, the intake process involves applying for benefits and services. In some systems this can be as simple as requesting permission to see a doctor, or as complex as determining which series of benefits a person should be applying for. The Social Process Model identifies the segment(s) of the industry to which the process diagram may apply, facilitating the use of the process diagrams in program-specific and cross-program initiatives.

In most cases, the optimizing business processes involves:

1. Scoping and assessing the current “as-is” state; and
2. Designing the future “to-be” processes.

The IBM Social Industry Model can help with both these stages. In the “as-is” analysis stage, the Social Component Business Map and Social Process Model enable a team to identify the scope of the business areas being assessed, within a program and across program areas. Then the Social Industry Model Workbench is used to download the process templates associated with the business areas so they can be used in assessing the processes and organizational components of the existing delivery processes. This identifies opportunities for improvement and innovation and determines the design parameters for the new processes.

In the “to-be” stage, the focus is on designing the service-delivery processes required for the future state. The Model’s process templates are used as a starting point for developing and documenting the future-state model.

Highlights

To help rationalize applications, the IBM Social Industry Model includes tools and content to assess applications that an organization wants to extend or change.

Utilizing the IBM Social Industry Model's comprehensive list of pre-defined process templates in both stages of the process redesign effort can yield significant benefits by:

- Ensuring the process analysis is performed from an enterprise-wide perspective; the resulting processes are not biased by the concerns of a particular program, organization unit, or delivery channel;
- Providing a framework to spur innovation in the organization by using process models that are based on successful practices in social organizations worldwide; and
- Supporting communication and more efficient development by using a framework that defines a consistent structure and naming convention.

The IBM Social Industry Model is designed to enable optimized business process models.

4.4 Application portfolio rationalization

Social organizations are usually saddled with disparate production applications that are often written in obsolete languages and access historically designed database systems. These applications may have undergone years of maintenance and enhancements that have reduced modularity and increased complexity. Usually, these efforts have introduced multiple linkages and dependencies between applications, making the process of change more error-prone and costly. With organizational evolution we also often find multiple applications undertaking identical or similar functions.

Highlights

The Model contains tools and content to assess existing applications.

The IBM Social Industry Model includes tools and content to facilitate the assessment of applications that an organization wants to extend or change. The business processes, activities and functions contained in the IBM Social Industry Model represent the functional requirements of social systems. By overlaying the functional requirements onto the existing systems, an organization can determine:

- *Gaps:* No system exists, the system lacks key functionality, or it is poorly designed;
- *Duplication:* Multiple systems compete for the same functionality; and
- *Overextension:* A system designed to support one function is extended to help support others for which it may not have appropriate capabilities.

In this approach, the initial step uses the Social Component Business Map and the Social Functional Model as a reference point to develop a functional requirements table for each of the selected components. Once complete, current functionality of the selected production applications is mapped and it becomes possible to see the resultant mapping on the Social Business Component map as illustrated in Figure 9.

This relatively simple illustration in Figure 9 shows that a number of high-priority red components are not covered by either of the two IT systems (i.e., there is a gap), while there is overlap and duplication in the provider performance management, document management and appeals components. It also shows that IT System 1 has some functions in campaign administration, but not enough to support the component as a whole, i.e., it is over-extended.

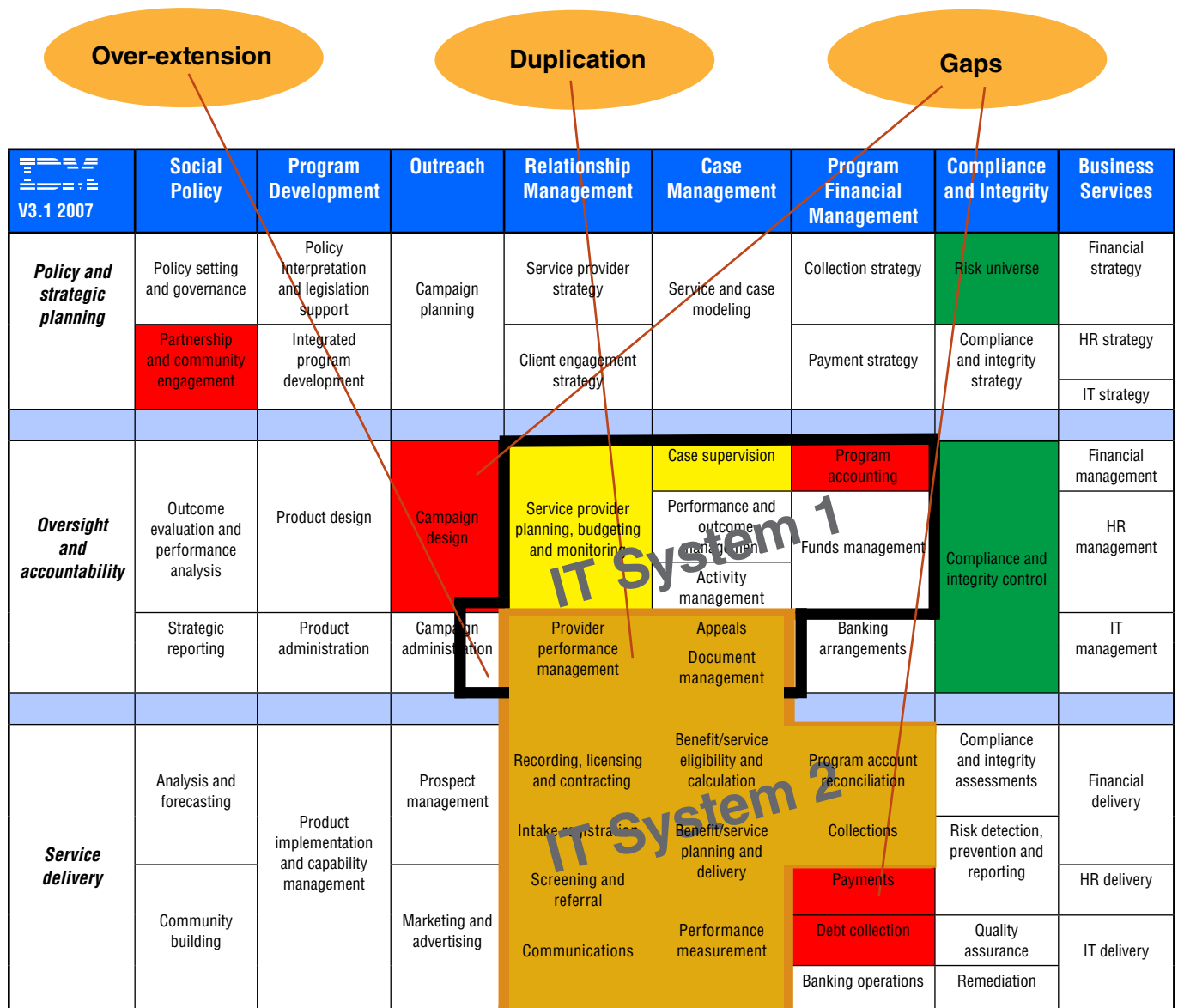


Figure 9: Application Portfolio Rationalization

Highlights

We have enabled the IBM Social Industry Model to functionally assess software packages and legacy applications.

This analysis would be used to re-align IT system usage so that it is more clearly aligned with the business components, without duplication, over-extensions or gaps. This analysis technique is particularly appropriate when looking across program-based IT systems and looking for cross-program leverage.

4.5 Do you buy or do you build; if you buy, what package meets the functional requirement?

A key decision that social organizations make when implementing new business systems is whether to buy or build the new application. While many factors go into this decision, a key element is the functional match to the business requirements. As a major systems integrator that both builds custom applications and implements many industry software packages, IBM has enabled the IBM Social Industry Model to assist with the functional part of deciding whether to buy or build.

For organizations interested in a buy option, the Social Functional Model and Social Software Assessment Tool allow them to build their requirements catalogue and test the readiness of the software market. Major vendors are already included in the tooling, and other vendors can be added by the team performing the analysis.

Highlights

Of course, there are always non-functional elements to consider in choosing how to implement business applications. Organizations need to consider:

- Strategic independence and the need to retain full development capabilities;
- Existing development skills and people capacity;
- Performance and scalability considerations;
- Architectural considerations;
- Legacy inter-operability; and
- Commercial risk.

The IBM Social Industry Model is designed to cover functional considerations in the buy versus build decision.

The IBM Social Industry Model provides a structured set of foundation models that act as a business layer for an SOA.

4.6 Building flexible and robust SOA-based business applications

Every social organization, and possibly each project, will have a distinct set of technology challenges relating to its target operating environment. These challenges range from the limitations of existing systems and infrastructure to the requirements of the selected solution architecture. Many organizations are looking at Service-Oriented Architecture (SOA) as a design approach to simplify a complex environment and/or extend legacy applications.

The IBM Social Industry Model provides a structured set of foundation models that act as a business layer for an SOA. It enables the identification, analysis and design of requirements-based solutions, irrespective of the target environment or modeling technique used.

The IBM Social Industry Model provides an input to the analysis and design phase for SOA-based legacy transformation, custom development and/or package implementation. The Social Component Business Map provides a strong starting point for developing a common representation of a social organization's business architecture, and the Social Reference Architecture provides sample artifacts to support the creation of a target Service Model.

This exact design approach will vary by the SOA modeling techniques used. The IBM Social Industry Model is designed to be independent of those techniques. What it provides is the business design framework for SOA-based applications.

Highlights

Together, IBM Social Industry Solutions and the IBM Social Industry Model give social organizations all of the tools and techniques as well as support and flexibility they need to take on any modernization initiative.

5. IBM Solutions for Social Organizations

IBM has a long, distinguished record working with many social organizations around the world, and that experience has directly influenced the development of the IBM Social Industry Solutions portfolio. IBM Social Industry Solutions combine our unique insight into social organizations with leading strategic consulting skills and unparalleled technical assets. The solutions are designed to meet the needs of organizations today and to help prepare for the challenges organizations will face tomorrow.

The solution portfolio includes a range of offerings to support social organizations during all phases of their modernization efforts and leverages the complete strength of IBM. The offerings are targeted to help organizations:

- ***Develop Strategies to Improve Service Delivery:*** leveraging innovation and global experience to help social organizations define where they want to go in the future, what outcomes they want to achieve and how they want to interact with their clients;
- ***Build Future Business Models and Processes:*** using the IBM Social Industry Model to define the best business model to achieve an organization's goals, to define the processes to support that new business model and to establish the transition plan to drive adoption of new models across employees, programs and partners; and,
- ***Implement Solutions to Support Your Business:*** applying leading industry software to implement technologies that support an organization's business goals, including integrated case management solutions, legacy transformation solutions and strategic software solutions, such as document management and business intelligence, which enhance an organization's service delivery capabilities.

Together, IBM Social Industry Solutions and the IBM Social Industry Model give social organizations all of the tools and techniques as well as support and flexibility they need to take on any modernization initiative. Further information about IBM Social Industry Solutions and the IBM Social Industry Model can be found at the IBM Global Social Segment Website at:

<http://www.ibm.com/government/social>

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Joseph has extensive consulting experience in business modelling and process redesign, originally in the insurance industry and more recently working with social organizations. He has in-depth experience in the area of case- and claims-management solutions and is a recognized expert in IBM's Component Business Modelling Methodology. Joseph has led the development of the IBM Social Industry Model.

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