



An Introduction to the Technical Considerations of Social Business Version 1.0

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Acknowledgements

This document is extracted from the *CTO's Guide to Social Business*, which is a collaborative effort from the W3C Social Business Community Group³ (SBCG). The SBCG brought together diverse business focused experiences and perspectives into a single guide for IT and business leaders who want to know more about social business. The following participants have provided their expertise and time to this effort.

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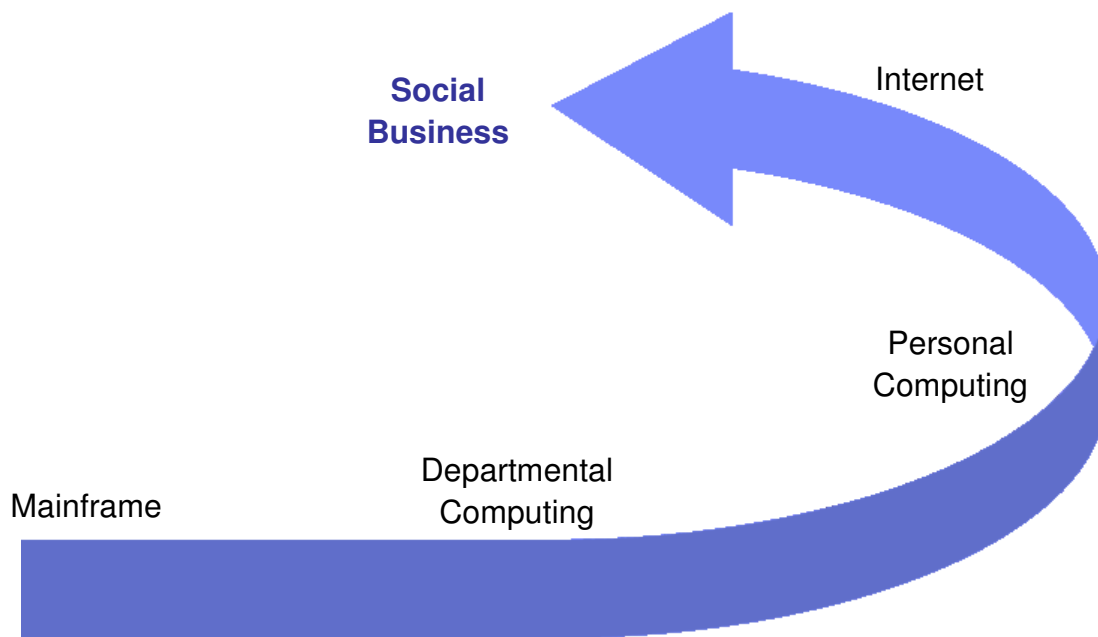
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Introduction

The primary target audience for this paper is an audience looking to get a better understanding of technical implications of social business. According to Forrester Research, 65% of Line of Business buyers will buy IT solutions without involving their IT staff. Technical professionals need to be aware of social business trends and technology so that they can lead their organizations' technical strategy as they become social businesses. Social business is an emerging area, as is the technology that enables it.

We are still early into the **Fifth Shift** in Business Technology



Source: Rawn Shah, 2/1/2011, Blogs.Forbes.com, *The Fifth Shift in Business Technology*, <http://blogs.forbes.com/rawnshah/2011/02/01/the-fifth-shift-in-business-technology/>

Adopting patterns from social networking into business settings is yielding new use cases that will drive new technology needs and the need for flexibility realized via open standards. Social business is quickly expanding beyond social media campaigns and employee blog sites. Social business intersects with other important IT trends. Forbes observes that “businesses faces a dynamic landscape where both customer and employee demands are changing. The world is changing, and there are three market shifts that are driving this change – mobile, social, and cloud. These trends change what we connect, how we connect and how we transact.”¹

What is a Social Business

What is a social business? A social business is an organization that applies social networking tools and culture to business roles, processes and outcomes. A social business enables people to engage productively in a business context through collaboration and interconnecting business activities with social content. The scope of a social business spans across internal organizational boundaries and can extend to partners and customers. A social business monitors and analyzes social data to discover new insights that, when acted on, can drive business advantage, for example faster problem solving, improved customer relations, predicting market opportunities, and improving processes both internal and external. A social business recognizes that people do business with people and optimizes how people interact to accomplish organizational goals:

- Connecting individuals in productive, efficient ways
- Expediting identification of expertise
- Capturing and sharing knowledge
- Providing line-of-sight across traditional boundaries and better aligning actions to needs
- Speeding up business with insight to anticipate and address evolving opportunities
- Encouraging a collaborative atmosphere

The following diagram illustrates the range and categories of Social Enterprise Processes.

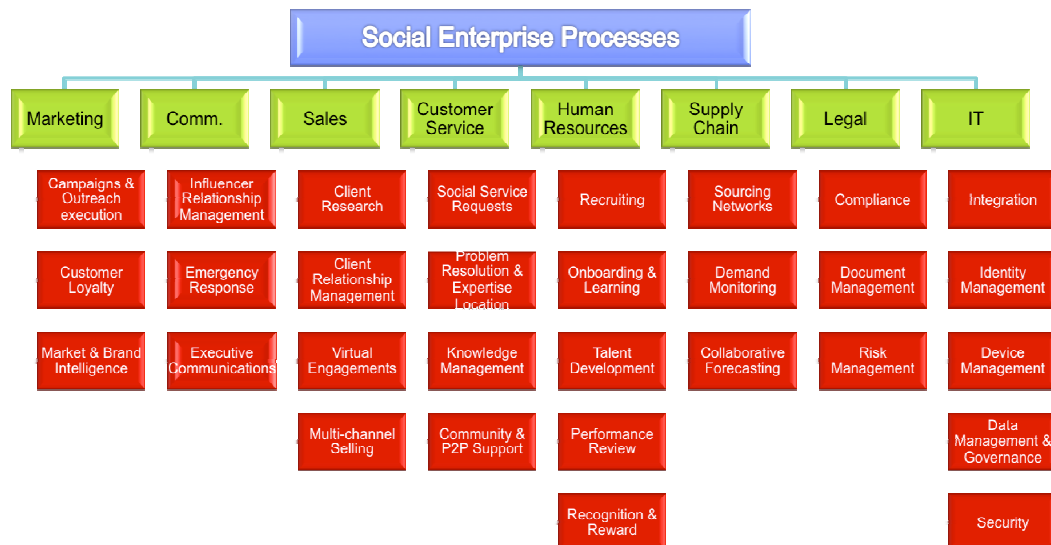


Chart Courtesy.....

Examples of social capabilities applied in businesses today:

- *Marketing and Communications*. Focused on use of social networking for marketing purposes. Emerging into more sophisticated customer relationship management scenarios that employ analytics capabilities; for example, brand monitoring via parsing and analyzing unstructured social content such as customer comments.
- *Human Resources*. Optimizing the workforce via collaboration software deployed to remove silos within an organization, improve information sharing and teaming, to achieve new innovation and more effective project teams.
- *Project Management (IT)*. Providing a more fluid approach to commenting, documenting, updating and advancing a project through participatory methodologies such as blogging about meetings, commenting on documents.
- *Cross-department collaboration*. Facilitating awareness of activities and informal sharing of knowledge and resources across departmental boundaries with activity streams, blogs, and discussion forums.

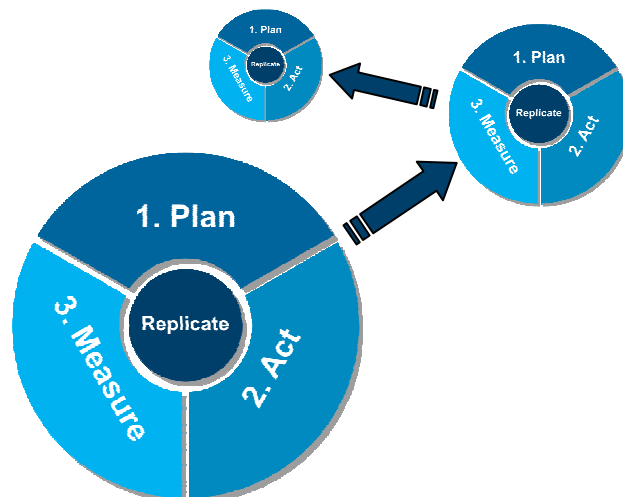
Social business scenarios are emerging that are central to how work is accomplished in an organization. These will increasingly impact core systems within an enterprise. Consider, for example, supply chain business processes where social interaction is introduced to achieve more effective handling of business process exceptions, business process adoption and process improvement. These trends will increasingly reach deeper into an organization's core systems and impact enterprise architecture. Social business is not disjoint from enterprise IT strategy and execution, but rather an integral component.

What are the technical considerations of these emerging social business scenarios? The W3C (World Wide Web Consortium), a community that drives open web standards, led an online 3 day collaboration event (a “JAM”), on the subject of social business use cases and the standards required to support them. Over 1000 people participated, representing 20 industries, and including executives and thought leaders with varied backgrounds and specialties². One recommendation from the JAM was the need to sustain the focus on open standards for social business. The result was the launch of the **W3C Social Business Community Group**, with a mission to “gather practical, business oriented, use cases focused on high-value transactions to influence and improve existing social standards in order to foster the growth and adoption of social standards in enterprise solutions.”³

The building blocks of social business start from two points of origin. On one hand there are a wide variety of consumer-driven technologies and patterns that foster collaboration and new approaches to engaging the user and communities. On the other hand there are a broad set of technologies, standards, and services that drive existing line of business applications and systems. This point of convergence is where we start to drive new value and visibility to existing processes, applications and data. It's important to note that this transformation does not require a one-size-fits-all approach. An effective approach is to start small and incrementally add capabilities over time as illustrated in the following figure.

- **Plan** – Identify your social business advocates and form a cross-functional team to develop your business case and articulate the expected returns from empowering processes with social capability
- **Act** – Develop a proof of concept by leveraging a social platform to extend existing solution investments
- **Measure** – Obtain stakeholder agreement for the proof of concept and establish the metrics of success by which social enablement for the project will be measured

Evaluate each implementation, replicate successes & build upon consecutive social investments to grow a comprehensive social business program



Technical Considerations

Here are brief introductions to some of the technical considerations of social business that are important for technical teams to understand and address as they deploy social capabilities for an enterprise.

Mobility

Mobile devices are increasingly used in enterprises. As such, mobile strategies are required that account for device allocation and management, (for example Bring Your Own Device (BYOD)), and security of corporate data stored on mobile devices. Mobility has become almost an essential part of social networking and this applies to social business as well. The always-on, personalized attributes of mobile devices create new scenarios for staying connected with colleagues and business tasks wherever the location.

Analytics

Social businesses require analysis of structured and unstructured content. For example, brands are monitored by analyzing customer comments on social networking sites. Another example is analysis of social interactions occurring during the order fulfillment process in order to detect patterns and areas for improvement. Some analytics scenarios will require a scope that includes existing corporate data (orders, inventory, sales, etc.) and unstructured social data, such as word processing documents, to gain insights into client and partner satisfaction and to identify process improvement opportunities.

Cloud

Cloud computing models enable flexible and rapid deployment of social software. Transitioning into a social business is a process in itself and will require a flexible IT infrastructure as demand for social capabilities increases and integration with enterprise applications change capacity requirements. There

are multiple deployment and service models for cloud computing. Software as a Service (SaaS), is one model particularly appealing to social business. The Cloud Standards Customer Council suggests “consider SaaS for rapidly evolving business environments where new requirements are likely to emerge, such as social business and web campaigns.”⁴

Service Oriented Architecture (SOA)

The flexibility of SOA is an architectural style now popular in many enterprises. SOA is an evolved approach to enterprise application integration whereby applications, in addition to providing user interfaces, also provide and consume services that enable integration of data and reuse of functional components across applications. Social businesses will leverage SOA to integrate social capabilities and technologies with core enterprise systems.

Security

Often a Social Business solution will encapsulate the knowledge of the organization it represents. Successful solutions will be oases of the collective intelligence of all of those who contribute to them. As a CTO you must consider how you will safeguard the information in the system. One of the reasons you build such systems is to protect the organization from brain-drain when people leave. Equally, how do you protect the organization against unauthorized access to that information whilst keeping it accessible?

The first step is to use encrypted communications. SSL communication is commonplace across the internet these days and there is really no good reason why you would not choose to implement it. Doing so prevents packet-sniffing and other attacks on your network traffic coming in and out. Consider also not making your social system directly accessible to the outside. Clientless VPN solutions provide a greatly-enhanced security solution with multi-factor authentication without the inconvenience of having to install a VPN client. You can apply much more rigorous authentication and encryption than would be possible using a simple user name/password combination even though it is still encrypted.

Within the organization consider who has access to the information in the system. While such solutions are about sharing and collaborating, senior managers will inevitably be concerned about who can see what they are sharing. Examine closely the security model your solution adopts and the implications of these. For example, most solutions organize themselves around communities. What access does a “public”, i.e. logged in but no special privileges user have? Can they see the existence of sensitive communities? Can they get into, say, a Project Management community but not into any sub-communities?

Consider too what effect having a broad social ownership has. Most systems permit the delegation of authority at some level to the people who are actually involved in contributing to the system. Does such delegation give them the right to include people you would consider to be unauthorized?

Backup / Restore

Any system which gains the trust of its users is always there, doesn't lose information, doesn't corrupt data and is accurate. People forget about the fact that it is a system at all and concentrate on their work using the system. What will you do if disaster strikes? More realistically, how granular is your ability to

recover a deleted community, a deleted file, a lost status update? What will your organization accept as down time while you bring it back?

Backup and Restore are often overlooked aspects of social systems. Sooner or later, however, you will be glad you spent that time thinking about it.

Many organizations focus on disaster recovery as their big solution. Clustering, co-location, log shipping, cloning etc, are all good solutions to the complete loss situation which almost never occurs. The more common and realistic problem we will face is recovering that granular information which if not handled properly erodes confidence and makes everyone think IT isn't doing its job.

Summary

Becoming a social business has technical and cultural implications. Social businesses adopt new technologies and patterns. To support the transformation to a social business, adoption of these technologies must be aligned with enterprise architecture. Social business technologies combine with and leverage other key technical trends such as analytics, service oriented architecture, cloud computing, and mobile. IT leaders must educate and partner with the lines of business leaders to successfully realize a strategic transformation to social business.

Appendix A: The W3C Social Business Community Group

We are in the formative stages of social business. Beyond pilots, beyond the getting started use cases, there are scores of valuable new and emerging use cases, yet to be imagined, defined, and implemented by the myriad of users challenged by their unique requirements. What we know is that whether enterprise, B2B, or B2C, an open standards-based ecosystem will most readily enable desired use cases to become reality with more flexibility of choice, with less time and cost. The real value of social business will not be realized if manifested as islands of point solutions. As social business becomes more pervasive, integration with core business systems, and across social platforms, will be desired. As we have seen with recent paradigms such as service oriented architecture (SOA) and Cloud, open standards are the enabler of this desired flexibility. The W3C Social Business Community Group is in place to define social business use cases that matter to businesses and drive the open standards based ecosystem needed to support those use cases.

The mission of the Social Business Community Group is to “gather practical, business oriented, use cases focused on high-value transactions to influence and improve existing social standards in order to foster the growth and adoption of social standards in enterprise solutions.”³

Consider joining the W3C Social Business Community Group. There is no membership fee, even if your organization is not currently a member of W3C. The W3C Social Business Community Group is a gathering place to understand the value of applying social concepts to business, share best practices with peers and subject matter experts, and influence the evolution of social business standards. The group is also producing a diagram to represent the various components of importance to social business, and the current standards landscape overlay, in order to identify and prioritize standards requirements for social business. Join the group and contribute your ideas.

For information on the Social Business Community Group, including how to join, visit this link - <http://www.w3.org/community/socbizcg/>

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