

Enterprise Social Collaboration Progression Model

Abstract

This paper presents a progression model of the emerging social collaboration paradigm to determine current states and future plans for instituting social collaboration strategies. The framework is organized by six phases and an initial overview of divisional/functional applications of enterprise social collaboration. A CEO or CIO can use the model as a general road map to identify opportunities in entering or improving an organization's use of social collaboration technologies and methods to achieve greater communication efficiencies.

The progression model focuses on collaboration between employees, partners, suppliers, and consumers, but does not include topics such as social marketing, brand awareness, sales, and non-integrated partners.

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Table of contents

1	Introduction	1
2	Value of social collaboration in the workplace	2
3	Social Collaboration Progression Model	3
3.1	Stage One: Basic	4
3.1.1	<i>Basic: Characteristics</i>	4
3.2	Stage Two: Standardized	4
3.2.1	<i>Standardized: Characteristics</i>	5
3.2.2	<i>Standardized: Prerequisite identifiers and triggers</i>	5
3.2.3	<i>Standardized: Obstacles</i>	5
3.2.4	<i>Standardized: Impacts</i>	5
3.3	Stage Three: Rationalized	6
3.3.1	<i>Rationalized: Characteristics</i>	7
3.3.2	<i>Rationalized: Prerequisite identifiers and triggers</i>	7
3.3.3	<i>Rationalized: Obstacles</i>	7
3.3.4	<i>Rationalized: Impacts</i>	8
3.4	Stage Four: Dynamic - Internal Integration	8
3.4.1	<i>Dynamic - Internal Integration: Characteristics</i>	8
3.4.2	<i>Dynamic - Internal Integration: Prerequisite identifiers and triggers</i>	9
3.4.3	<i>Dynamic - Internal Integration: Obstacles</i>	9
3.4.4	<i>Dynamic - Internal Integration: Impacts</i>	9
3.5	Stage Five: Dynamic - Holistic Integration	10
3.5.1	<i>Dynamic - Holistic Integration: Characteristics</i>	10
3.5.2	<i>Dynamic - Holistic Integration: Prerequisite identifiers and triggers</i>	11
3.5.3	<i>Dynamic - Holistic Integration: Obstacles</i>	11
3.5.4	<i>Dynamic - Holistic Integration: Impacts</i>	11
3.6	Stage Six: Dynamic - Innovative	12
3.6.1	<i>Dynamic - Innovative: Characteristics</i>	12
3.6.1.1	Technologies	12
3.6.1.2	Organizational scope of collaboration	13
3.6.1.3	Culture, governance, and management	13
3.6.2	<i>Dynamic - Innovative: Prerequisite identifiers and triggers</i>	14
3.6.3	<i>Dynamic - Innovative: Obstacles</i>	14
3.6.4	<i>Dynamic - Innovative: Impacts</i>	15
4	Divisional application of the Progression Model: A starting point	16
4.1	Sales and marketing	16
4.2	Product development	16
4.3	Operations and distribution	16
4.4	Customer support	16
4.5	Business support	16
5	Summary	18
6	References	19

1 Introduction

Social collaboration is quickly becoming both a mainstream concept and a necessity in modern business. It creates value by modifying social tendencies and communications that are prevalent in the non-work environment and applying them to the professional sphere. Doing so captures the benefits of increased efficiency, cost savings, and more effective distribution tasks among employees. Web-based social collaboration tools and methods seek to capture human social interaction within a technology-based solution to business needs.

The six phases identified in this paper represent a progression model that can be used to ascertain an organization's current state in the social collaboration paradigm. This paper identifies the prerequisites that are necessary to move to a chosen target stage, the obstacles that must be overcome, and the impacts of such a transition. The paper also addresses a high-level view of how social collaboration applies to the divisional levels within an organization.

2 Value of social collaboration in the workplace

Organizations at the forefront of the social collaboration wave will set the future direction for what it means to be an industry leader. In the competitive world of 21st century global business, they must find new efficiencies while maximizing employee engagement and contributions to compete. An enterprise social network (ESN) is one of the newest tools to provide an advantage in this area. Failing to capitalize on social collaboration and its effects may well result in losing competitive advantage.

Social collaboration's value in the workplace is visible in company culture, employee behavior, and quantifiable metrics. It increases efficiency by reducing employee redundancy, streamlining basic tasks, and improving collaborative techniques to produce higher quality output. Social collaboration technologies offer a variety of inward-facing features to an organization, from live collaboration components to shared workspaces to easy identification of project partners. On the outward-facing end of the spectrum, social collaboration technologies can greatly improve the timeliness and quality of business-to-business interactions as well as customer relationships through real-time communication.

Two companies' reasons for implementing social collaboration

Best Buy. Through its enterprise social network, Best Buy leverages its employees to capture growth at the local level by peer-to-peer operational problem solving, crowdsourcing idea generation, and increased employee retention and company identification.¹

Dell Computers. Dell's Business Intelligence team increased productivity by using social collaboration tools to improve knowledge management, increase collaboration, and build cross-functional teams through collaboration, think tanks, and news groups.²

¹ FastCompany. (2008, November 6). "How Best Buy Engages Employees to Improve Productivity."

² Press, E. e. (2012, November 5). "Next Generation Management: Social Media Strategy for Team Empowerment."

3 Social Collaboration Progression Model

Microsoft and the Eller MBA program at the University of Arizona jointly developed the Social Collaboration Progression Model (shown in the following figure) that outlines six stages of social collaboration and their triggers, obstacles, and impacts. The model flows sequentially from Stage One through Stage Four, which is when an organization decides to continue sequentially to Stages Five and Six or move directly to Stage Six. This choice hinges on whether the organization has a strategic need to incorporate outward-facing social collaboration into its system.

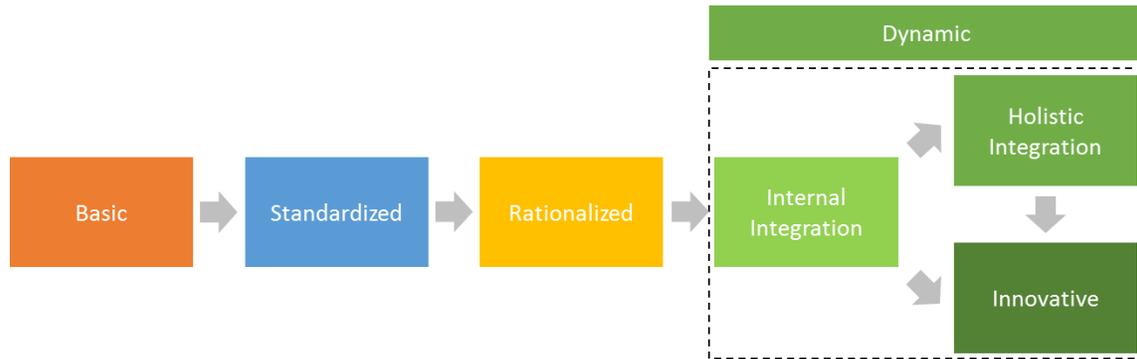


Figure 1. The path through the Social Collaboration Progression Model

Six categories define each stage: social technologies, collaborative culture, organizational scope, customization, infrastructure management, and governance (shown in the following figure). These categories become more developed and intricate with each progressive stage.

	Basic	Standardized	Rationalized	Dynamic		
				Internal Integration	Holistic Integration	Innovative
Social technologies	Traditional communication tools and document sharing	Autonomous group-based collaborative tools without a common platform	Group-based tools within a common platform, requiring oversight	Inward-facing, centralized, and inter-department collaboration	Inward and outward-facing, centralized collaboration	Exploratory technologies, dynamic
Collaboration culture	Individual-oriented and change resistant	Small group-oriented and change receptive	Division-oriented and proactively engaged	Employees empowered and engaged with enterprise-wide collaboration	Pervasive throughout firm, adaptive collaboration mindset	Creative, innovative, and experimentation culture
Organizational scope	No formal social collaboration implemented, flow through siloed paths	Limited to intra-department collaboration	Strategic social integration aligned with functional goals	Enterprise-wide strategic social integration	External social integration, mutual data fusion to create symbiotic relationship	Unified platform for social collaboration universe
Customization	None	Customized by users, not linked to group strategy	Tool customization driven by group strategy and executed by IT	Centralized social platform that enables simple customization by individual users	High-level customization to accommodate external participants	Extremely customized and adaptable
Infrastructure management	Reactive, ad hoc	IT support for tool adoption and maintenance	Formal IT processes established, high-level IT support	IT processes aligned with enterprise strategy	Externally faced security and data accessibility	Proactive in identifying new technology
Governance	Not well established policies	Policies established formally, weak enforcement	Policies actively enforced and applied by IT	Policies aligned with core strategy, enforcement not limited to IT	Expansion of collaboration policy to include external network and devices	Collaboration director integrates new technologies, enforces social contracts

Figure 2. Social Collaboration Progression Model

3.1 Stage One: Basic

The Basic stage is the simplest level of social collaboration and is characterized by its reliance on traditional communication methods. Because the model targets Fortune 500 CxO clientele whose companies are already beyond this point, the Basic stage serves primarily as a benchmark for the later stages.

	Basic
Social technologies	Traditional communication tools and document sharing
Collaboration culture	Individual-oriented and change resistant
Organizational scope	No formal social collaboration implemented, flow through siloed paths
Customization	None
Infrastructure management	Reactive, ad hoc
Governance	Not well established policies

Figure 3. Basic stage

3.1.1 Basic: Characteristics

The Basic stage's characteristics are largely traditional. Note that the social technologies used are at an entry level, such as basic email and document sharing. Social collaboration processes and procedures are informal at best and any formalized information paths are hierarchical in nature. Ultimately, the management of infrastructure is reactive, and proactive efforts are limited or non-existent.

3.2 Stage Two: Standardized

The Standardized stage is an organization's first step along the path of developing a social collaboration system. Many large organizations have made it to this stage already: they have adopted collaborative tools and policies to govern their use, but still lack a unifying platform. Collaboration is not yet enterprise-wide.

	Standardized
Social technologies	Autonomous group-based collaborative tools without a common platform
Collaboration culture	Small group-oriented and change receptive
Organizational scope	Limited to intra-department collaboration
Customization	Customized by users, not linked to group strategy
Infrastructure management	IT support for tool adoption and maintenance
Governance	Policies established formally, weak enforcement

Figure 4. Standardized stage

3.2.1 Standardized: Characteristics

At this stage, social technologies are limited to autonomous group-based tools, oftentimes through third-party services such as Lync or SkyDrive. As a result, the organization is developing the beginnings of a more collaborative culture: small group-oriented and passively receptive to change. The scope of the organization's social collaboration is limited internally within specific departments, although there is experimentation with inter-group collaboration. In terms of customization, individual users can personalize available tools. Governance is characterized by formal but weakly enforced policies. Infrastructure management has minimum IT strategic involvement, although there is some support for tool adoption and maintenance.

3.2.2 Standardized: Prerequisite identifiers and triggers

Adopting the Standardized stage is of value for the following organizational factors:

- Requires off-site work
- Has outputs that require input from multiple employees at the same time
- Finds email burdensome

3.2.3 Standardized: Obstacles

There are two primary obstacles that can hinder movement beyond the Basic stage:

- **Cultural resistance to change.** Although transitioning from virtually no collaboration to autonomous collaboration tools should not be difficult, the transition from Basic to Standardized is an opportunity to begin establishing a culture of change that will ease further progression along the model.
- **Weak enforcement of policies.** As the use of collaborative tools increases, enforcement of formal governance policies is necessary, but making an organization with no previous policies accustomed to active enforcement will be a challenge.

3.2.4 Standardized: Impacts

Successful implementation of the Standardized stage increases workflow efficiencies, reduces output redundancies, and provides common access to data. United Services Automobile Association (USAA)

used social tagging, or folksonomy, within Microsoft SharePoint to provide faster delivery of services, improved information quality, and lower development costs. “Everyone can be involved in creating the best services, producing documentation, and answering questions. Ultimately, helping our employees find information and one another faster leads to faster development of new products and services for members, and this makes us more competitive.”³ (Microsoft, 2010)

3.3 Stage Three: Rationalized

The Rationalized stage represents the midpoint of the Social Collaboration Progression Model. At this point, socially collaborative tools and policies are standardized and documented.

	Rationalized
Social technologies	Group-based tools within a common platform, requiring oversight
Collaboration culture	Division-oriented and proactively engaged
Organizational scope	Strategic social integration aligned with functional goals
Customization	Tool customization driven by group strategy and executed by IT
Infrastructure management	Formal IT processes established, high-level IT support
Governance	Policies actively enforced and applied by IT

Figure 5. Rationalized stage

³ Microsoft. (2010, June 29). “Financial Firm Aims to Speed Delivery of New Services with In-House Social Media.”

3.3.1 Rationalized: Characteristics

The Rationalized stage builds on the shift to a culture of change from the Standardized stage and institutes a common platform, such as SharePoint, for its collaboration tools and procedures. The culture becomes division-oriented and proactively engaged in a social integration strategy aligned with functional goals. Customizable tools for individual users are determined by the group and implemented by IT. The organization has sound infrastructure management with a high-level IT support team and formal processes established.

Lastly, governance policies are not only formalized but also enforced at this stage. The importance of this enforcement is represented through Hewlett-Packard's recent development of records management software, HP TRIM. As more and more organizations use software such as

Microsoft SharePoint, this software allows an organization to archive all pages, documents, and posts to SharePoint. The ability to maintain records of this magnitude will allow organizations to better monitor compliance. This software is an indicator of the need for formalized enforcement capabilities.

Basic to Rationalized: A Case Study of the U.S. Army⁴

During the last decade, as the U.S. Army evolved its strategy and methods to meet a counterinsurgency threat for which it had not been prepared, an important change was made in how information flowed across a non-contiguous battlefield.

From the initial incursion of Iraq in 2003 to "surge operations" in 2007-2008, the Army grew rapidly from an organization that relied heavily on email to one that made robust use of social computing through SharePoint. No longer relying on hierarchical point-to-point information sharing, the U.S. Army pooled information in an organized manner, allowing for fast, cross-unit information discovery and transfer across the battlefield.

"DCGS-A tools and 'flat' network data access. . . have allowed us to fight the enemy versus fighting the information—[in] seconds and minutes instead of hours and days." – *U.S. Army Intelligence Analyst*

3.3.2 Rationalized: Prerequisite identifiers and triggers

Two central identifiers exist for adoption of the Rationalized stage:

- The disconnected social collaboration techniques and software from the Standardized stage become inefficient as they multiply.
- The small groups in the Standardized stage seek to extend their collaboration network.

3.3.3 Rationalized: Obstacles

As the organization begins inter-group collaboration, friction and disagreement can ensue over collaborative work methods and techniques. An organization can mitigate this friction through standardized policies and managerial focus on nurturing collaborative relationships. Lastly, some attachment to original third-party technologies that began the process of social collaboration may be hard to remove, because employees have generated an attachment to these tools. Atos, a French information technology company with more than \$11.5 billion in revenue, recently implemented a zero email goal policy. The company expects all communication to be conducted over social platforms and instant messaging. Although many employees have had difficulty adapting to the policy change, the company's dedication to the policy for the last two years resulted in a 20% reduction of email use amongst its 74,000 employees. According to Atos CEO Thierry Breton, implementation of the policy has reduced overall information overload and data pollution and has led to increased productivity.

⁴ AUSA. (2007). "Key Issues Relevant to Army Intelligence Transformation." AUSA Torchbearer.

3.3.4 Rationalized: Impacts

The Rationalized stage takes the benefits of the Standardized stage and builds upon them. Both stages create greater efficiency and value for the organization; however, the Rationalized stage extends these benefits. Where value originally existed in connecting members within a similar department, now value manifests through connecting members of various departments within a larger division. Because of the growing level of common access to information, the organization should consider adding a layer of oversight to the social collaboration process in the form of knowledge management (KM). Whether as an additional responsibility or as a separate position, the knowledge manager's duty is to ensure the continued reduction of information redundancies and ease of access to output.

3.4 Stage Four: Dynamic - Internal Integration

The Internal Integration stage marks the first advanced stage of social collaboration and requires full organizational commitment and linkage to enterprise strategy. The successful implementation of social collaboration at the divisional level results in broad internal support for social collaboration initiatives. Employees support it after experiencing the empowerment it provides to the work, and managers support it because of its observable results.

	Internal Integration
Social technologies	Inward-facing, centralized, and inter-department collaboration
Collaboration culture	Employees empowered and engaged with enterprise-wide collaboration
Organizational scope	Enterprise-wide strategic social integration
Customization	Centralized social platform that enables simple customization by individual users
Infrastructure management	IT processes aligned with enterprise strategy
Governance	Policies aligned with core strategy, enforcement not limited to IT

Figure 6. Internal Integration stage

3.4.1 Dynamic - Internal Integration: Characteristics

The Internal Integration stage builds on the common platform established during the previous stage and adds inward-facing, centralized, and inter-group collaborative tools, such as Yammer, into its social collaboration strategy. Such a technology builds on the information-sharing capabilities of the common platform within the Rationalized stage and integrates the technologies with daily work processes. Providing a means to collaborate in real time through online social circles linked to workflows leads to a collaborative culture in which employees are empowered and engaged with enterprise-wide social solutions. Customization at this stage is specific and simple; the individual user can personalize their profile and their software. Such customization is supported by IT and an infrastructure management strategy. In addition, the organizational scope is enterprise-wide and social tendencies are integrated in

every function of the organization. An example of this integration is represented by Unisys, an IT services firm that found it necessary to improve communication speed among its 23,000 employees. The goal of speeding up its internal communications was to enable employees to get real-time answers by more quickly identifying and connecting with subject matter experts. Unisys initiated a three-year roll out strategy they started with the use of Microsoft SharePoint. After deployment, a culture was established in which daily use was expected of all employees. The CEO also participated, and the company ultimately enjoyed greater communication among employees, increased collaboration, and greater productivity.⁶

3.4.2 *Dynamic - Internal Integration: Prerequisite identifiers and triggers*

The key to entering the Internal Integration stage is to capture the value gained from successful divisionally focused social collaboration and apply it to the entire enterprise. Mid-sized organizations are the best adopters of this stage because of their resources and need for an effective collaboration across sub-organizations.⁷

3.4.3 *Dynamic - Internal Integration: Obstacles*

This level of integration presents a potential challenge in the form of micromanagement. Social collaboration relies on peer-to-peer information sharing that bypasses traditional information silos.⁸ If employees feel that they are heavily monitored by using a social collaboration platform, they will avoid the collaboration tools rather than risk making mistakes in what they do and how they collaborate. Simultaneously, there is a legitimate need to monitor the quality and content of internal communications. Management must find a balance here. One solution is the establishment of a “social contract” between management and employees that allays fears of reciprocity toward employees in return for employee participation and compliance. Additional details about such a solution are provided later in this paper in the “Stage Six” section.

3.4.4 *Dynamic - Internal Integration: Impacts*

At this stage, an organization has the option to use email primarily as an external communication tool and to use a common centralized platform for internal communications. Atos's CEO stated the following about

Internal Integration: A case study of AT&T

In 2007, AT&T implemented T-Space, an internal social collaboration platform that led to an 80 million dollar productivity increase through the ability to find subject matter experts (SMEs) alone. Similar in structure to LinkedIn, T-Space provides for personal profiles synched with HR contact information. Discoverability of SMEs is aided by profile information, keyword tagging, and accomplishment badges (gamification participation awards).

AT&T made ease-of-use a priority by creating T-Space on a customized internal portal, making it “a part of the internet.” Employees form groups and sub-groups where they can collaborate in private spaces until a project is ready for company-wide visibility. A T-Space wiki provides employees with quick answers and access to properly versioned documentation. Incentives such as quarterly contests, increased users and profiles, and page views resulted in a 273% increase in groups, 561,549 participation badges, and 4,100 distinct active users during 2011.⁵

⁵ Social Media. (2012, January 24). “AT&T: Moving from Social Media to Social Business on the Intranet.”

⁶ Kass, K. (2013). “From Silos to Social: How Unisys socially-enabled its global enterprise.”

⁷ Ray, T. (2013, February 22). Sr. Business Strategy Consultant. (J. Allen, A. Gupta, M. Philpott, S. Valluripalli, N. Yusoff, & M. Ashbrook, Interviewers)

⁸ Schmidt, R., & Nurcan, S. (2009). BPM and social software, pages 649-658. *Business Process Management Workshops*, Springer Berlin Heidelberg

his zero email policy: "We are producing data on a massive scale that is fast polluting our working environments and also encroaching into our personal lives. At Atos we are taking action now to reverse this trend."⁹ AT&T observed that its use of T-Space reduced the time required to create a project team with the relevant skill sets and saved \$80m in productivity. In addition, a strong centralized system can more efficiently connect employees with data, thereby reducing or eliminating the need for a more time-intensive approach by the Knowledge Manager as was required in earlier stages. Individuals can solve problems quickly and move forward more efficiently.

3.5 Stage Five: Dynamic - Holistic Integration

The Holistic Integration stage is marked by the internal and external integration of software and services. It represents the ultimate degree of internal interconnectivity, and also the value in being socially collaborative with an organization’s customer base and the general public. Its two key traits are external crowdsourcing and external gamification, which allow for the utilization of human capital outside the organization.

	Holistic Integration
Social technologies	Inward and outward-facing, centralized collaboration
Collaboration culture	Pervasive throughout firm, adaptive collaboration mindset
Organizational scope	External social integration, mutual data fusion to create symbiotic relationship
Customization	High-level customization to accommodate external participants
Infrastructure management	Externally faced security and data accessibility
Governance	Expansion of collaboration policy to include external network and devices

Figure 7. Holistic Integration stage

3.5.1 Dynamic - Holistic Integration: Characteristics

In terms of social technologies, the Holistic Integration stage offers a centralized internal platform. It provides technology that is both inward and outward-facing, and also allows for group-based collaborations. At this point social collaboration has become second nature to the organization, and its employees and the organization extend the scope of its social collaboration externally. Customization is at the highest level; both internal and

Holistic Integration: Consumer experience is the new ‘Crown Prince’¹⁰

Most people are multi-tasking throughout their day and we wanted to dive deeper into the consumer motivations behind why they use multiple screens. In our new study, called Cross-Screen Engagement, we found that while the era of ‘Content is King’ isn’t over per se, there is a new ‘Crown Prince’ coming on the scene: consumer experience. While marketers once generated content to fit manufactured and static

⁹ Atos. (2013). "Collaboration and social media."

¹⁰ Hritzuk, N. (2013, March 14). "New Microsoft Advertising Study; Consumer Experience is the New 'Crown Prince'."

external users can modify the platform, thereby creating a better, more effective experience. An excellent example of this capability is through AT&T's use of gamification, specifically by use of the online collaborative community named TIP. TIP uses an external crowdsourcing platform that allows the imagination of its community of innovators to develop the next great ideas. The platform does this by gamifying the process with "TIP points" and recognizing their work publicly. In addition to the fusion of internal and external users, this stage also maintains infrastructure management that is primarily focused on maintaining external security as the organization builds its external collaboration channels. Lastly, governance policies are extended externally and formal oversight is established for external users.

advertising placements, consumers now control their own flow of content – from day to night, and from screens large and small. So it's even more imperative that marketers understand consumer motivations in order to meet them in their moment.

Our study identifies that consumers typically follow four multi-screening pathways:

- Content Grazing (68%)
- Investigative Spider-Webbing (57%)
- Quantum Journey (46%)
- Social Spider-Webbing (39%)

Seth Patton from Microsoft says "Customer buying cycles are radically changing, and CRM software has to evolve to keep up." On average, customers are about 57 percent into the buying process before engaging with a vendor. Seth goes on to say "As we look at the rising importance of not just marketing, but marketing working closely together with sales and service across the customer lifecycle of attracting customers, retaining them, creating future advocates, then getting to know those customers better and having the ability to have great interactions across those touch points becomes more important." Focusing on bringing these worlds together, Microsoft is combining internal social collaboration through Yammer with external sentiment listening with Netbreeze and providing the ability to execute social media campaigns with Marketing Pilot and Dynamics CRM.¹¹

3.5.2 *Dynamic - Holistic Integration: Prerequisite identifiers and triggers*

This stage has several prerequisites:

- The organization is internally integrated.
- Data sharing and storage is unified and extensive.
- The executive team embraces the openness, agility, and creativity of social technologies.

When the organization seeks to apply the benefits of social collaboration to its communications within the rest of its value chain is the primary trigger for the move from the Internal Integration stage to the Holistic Integration stage. If an organization can master holistic integration, it can communicate B2B and B2C at speeds not possible in previous stages.

3.5.3 *Dynamic - Holistic Integration: Obstacles*

There are potential obstacles that must be addressed at this stage, because greater integration creates security risks and uncertainty to data ownership. In addition, technological barriers can become a problem as it becomes difficult for IT to streamline external systems with internal ones.

3.5.4 *Dynamic - Holistic Integration: Impacts*

Holistic Integration is the most multidimensional stage on the progression model and can provide the greatest value if executed correctly. Productivity is high and employees recommend better solutions in

¹¹ Ciecierski, A. (2013, May 7). "How Microsoft Dynamics CRM Will Use MarketingPilot, Netbreeze, and Yammer to Support the New Customer."

less time because of the information flow within the value chain. The increased efficiency of communication within the value chain can supplement supply chain management (SCM) tools and further reduce days of inventory outstanding. In addition, the amount of information and ingenuity is unparalleled by involving the external environment; crowdsourcing components can bring greater quality and competition. Overall, the level of integration drives innovation and can allow an organization a constant flow of fresh ideas and knowledge.

3.6 Stage Six: Dynamic - Innovative

Early adoption of technologies and methods into an integrated strategy provides the one thing that all businesses seek: competitive advantage. By seeking out and intelligently adopting new social collaboration technologies and applications, organizations unlock latent internal capabilities by providing employees the best means to flatten out their information sharing process. The end result is a competitive increase of productivity that saves more time and money than non-adopters.¹²

	Innovative
Social technologies	Exploratory technologies, dynamic
Collaboration culture	Creative, innovative and experimentation culture
Organizational scope	Unified platform for social collaboration universe
Customization	Extremely customized and adaptable
Infrastructure management	Proactive in identifying new technology
Governance	Collaboration director integrates new technologies, replaces social contracts

Figure 8. Innovative stage

3.6.1 Dynamic - Innovative: Characteristics

3.6.1.1 Technologies

New social collaboration technologies are currently within the early adoption stage. Two such examples are semantic web and 3D immersive.

Semantic web is a growing movement that seeks to standardize the unstructured data on the Internet and allow the sharing and interpretation of data across platforms and applications. Most importantly, its function is to analyze “the content, links, and transactions between people and computers.”¹³ The ability to process unstructured information within a social collaboration platform will replace the time-consuming and incomplete tagging systems in use today, greatly increasing the capability of employees to more efficiently seek out information within internal and external networks. “With semantic technologies, which also are being referred to as Web 3.0, computers have a greater understanding of relationships between

¹² Saloner, B., Shepard, A., & Podolny, J. (2001). *Strategic Management*. New York: John Wiley & Sons.

¹³ Berners-Lee, T., & Fischetti, M. (2000). *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web*. HarperCollins Publishers.

different information, rather than just forwarding links based on keyword searches.”¹⁴ With the semantic web, a search would produce more direct information and answers, along with links to the source of the information. Today, when searching for a type of business in Bing.com, the user is provided a map of the area with relevant businesses pinned in the map. The results are listed below the small map with key information such as a phone number, address, and hours of operation, in addition to links to their webpages and directions.

Semantic web leads to better-customized search results. Best Buy uses semantic web with RDFa (Resource Description Framework in attributes) markup and the Good-Relations vocabulary. Using these aspects of semantic web has produced more effective, targeted search results for its shoppers, thereby increasing site traffic by 30 percent.

Secondarily, 3D immersive is a technology used predominantly as a training tool by fields such as electric utilities, military, and first responders to simulate real-world environments. Experiments in group collaboration through 3D technologies such as Second Life have shown 3D environments result in a higher level of engagement than a web-based desktop sharing environment. 3D environments are also a potential answer to the increasing need for distance collaboration within the modern workspace. The incorporation of 3D immersive technologies within a social collaboration strategy has great potential for maximizing group workflow efficiencies.

3.6.1.2 Organizational scope of collaboration

As seen in Stage Five of the progression model, external integration of B2B partners and B2C information channels requires successful internal integration. Although an organization may implement both inward and outward social collaboration systems, they remain delinked for reasons such as design and security. Currently, internal and external integration are developing on separate timelines and will likely remain so within the next five-year period.¹⁵ A few organizations have created internal-external integration by integrating vendor data into internal databases and analytical applications in a web environment. However, governance and security concerns are proving to be significant obstacles in opening up such integrations into the B2B realm.¹⁶

However, combining inward-facing and outward-facing functions into a single interface and further reducing tool redundancies is certainly a consideration for the future.¹⁷ Eliminating the requirement for employees to constantly switch between company programs and vendor interfaces to perform tasks will further increase workflow efficiency.

3.6.1.3 Culture, governance, and management

As adoption of social collaboration within the workplace increases, two specific challenges for management emerge: assigning accountability for social technology implementation and a trust gap between employees and management.

The first challenge is to assign accountability for development and integration of social technologies within an organization. Currently, most organizations place this responsibility with IT, which can result in low usage when the exact needs for the technologies are not specified by management and users, and the requirement to "become social" is reduced to one to be fulfilled and forgotten. Beyond IT, Moritz

¹⁴ Krill, P. (2010, January 26). "Microsoft talks up semantic search ambitions."

¹⁵ Ray, T. (2013, February 22). Sr. Business Strategy Consultant. (J. Allen, A. Gupta, M. Philpott, S. Valluripalli, N. Yusoff, & M. Ashbrook, Interviewers)

¹⁶ Ibid.

¹⁷ Bischoff, B. (2013, February 11). Director, Microsoft. (J. Allen, A. Gupta, M. Philpott, S. Valluripalli, N. Yusoff, & M. Ashbrook, Interviewers)

Berger, Microsoft Director of Business Architecture, suggests that assigning accountability to any single functional area poses the risk of social collaboration efforts becoming focused on that given area.¹⁸

Given these considerations, the development of a chief social collaboration officer or a chief innovation officer is a potential solution. Such a solution would allow the implementation of social collaboration with a practical view of strategy, independence from functional agendas, and appropriate motivation to ensure compliance to the new collaborative.

The second challenge is the uneven utilization of social technologies that results from a trust gap between management and employees. As organizations and their HR departments use deep analytics to monitor employee behavior, a lack of trust might exist in the business-to-employee sphere. A distrustful atmosphere could impede the implementation of social collaboration by discouraging workers from being appropriately open on available tools (for example, fear of content monitoring), and simultaneously create a checkbox environment that encourages bare minimum of social tool use (for example, fear of repercussions for lack of activity).

There are two possible solutions to this trust challenge. First, an organization can use incentives for the use of platforms instead of threatening repercussion for non-use. Many organizations with social collaboration platforms are using gamification applications to solve this problem. A second and more fundamental solution is a bi-directional “social contract” between organizations and employees; employees promise participation and compliance, and the organization allays fears of reciprocity toward employees.

3.6.2 Dynamic - Innovative: Prerequisite identifiers and triggers

An organization can choose to move into the Innovative stage either from the Holistic Integration stage or to move directly from the Internal Integration stage, skipping Holistic Integration. An organization determines their pathway based on whether holistically integrating social collaboration fits into their overall strategy. The risks to network and information security within organizations that require elevated data security, such as financial investment companies or federal agencies, may well outweigh the potential benefits of integrating a social collaboration network with external partners.

However, certain prerequisites must be met for an organization to be successful in implementing such innovative developments:

- There must be a strategic need for adopting innovative components.
- The IT department must be:
 - proactive in identifying new applicable technologies
 - capable of integrating them into current systems, which includes the need for current systems to be up-to-date and compatible
- The organization must develop a culture of experimentation and contain a core of adaptive and innovative leaders to grasp the implications of implementation.

3.6.3 Dynamic - Innovative: Obstacles

Potential obstacles to taking advantage of nascent social applications are technological barriers to implementation and extensive training requirements.

If an organization institutes technology, policies, and procedures with few precedents, training its personnel in their use poses an obstacle. The Harvard Business Review notes that employee resistance to change can be traced to information overload resulting from the repeated and rapid development of

¹⁸ Berger, M. (2013, February). Microsoft Director of Business Architecture. (J. Allen, A. Gupta, M. Philpott, S. Valluripalli, N. Yusoff, & M. Ashbrook, Interviewers)

new technologies.¹⁹ The organization must therefore ensure that its employees understand the new technology's value and subscribe to its adoption. If an organization decides to integrate a 3D immersion training module into its curriculum, for example, it must not only train its employees on its use, but it must ensure that those responsible for conducting the 3D immersion training “develop specific expertise and sufficient practical experience of [virtual reality] learning in order to effectively support learning process in 3D environments.”²⁰ Developing such expertise is key to the technology's success and therefore its adoption. HBR makes clear that both acquiring and implementing technology go hand in hand.²¹

3.6.4 *Dynamic - Innovative: Impacts*

Because the technologies, scopes, and methods within the Dynamic stage are not yet widely adopted, the benefits of implementation provide a competitive advantage that maximizes gains inherent in earlier stages: reduction of redundancies and improvement of group agility.

¹⁹ Leonard-Barton, D., & Kraus, W. (2013). “*Implementing New Technology.*” Harvard Business Review.

²⁰ Riva, G., & Galimberti, C. (2003). “VR Learning: Potential and Challenges for the Use of 3D Environments in Education and Training.” *Towards CyberPsychology: Mind, Cognitions and Society in the Internet Age.*

²¹ Leonard-Barton, D., & Kraus, W. (2013). “*Implementing New Technology.*” Harvard Business Review.

4 Divisional application of the Progression Model: A starting point

There is limited published research focused on departmental social collaboration characteristics and applications. Nonetheless, effectively implementing enterprise-wide social collaboration requires an understanding of how individual departments can use and benefit from adoption. In addition, some organizations may determine that limiting adoption to certain functional areas fits their strategies better than wholesale adoption.

4.1 Sales and marketing

Compared to other business divisions, marketing is at the forefront of social media from its inception. Although marketing is primarily outward-facing, smart use of social media can provide internal benefits to an organization. Data mining and Business Intelligence tools improve customer insights and market research. Sales channels that are directly linked with internal social collaboration tools provide a means to efficiently gather and act on customer feedback. Furthermore, the ability for marketers to monitor consumers' online behavior and integrate that data into a social collaboration pipeline would improve their customer targeting efforts.

4.2 Product development

Product development can benefit greatly from internal crowdsourcing platforms. For example, AT&T has achieved significant benefits from its internal crowdsourcing platform The Innovation Pipeline (TIP), which resulted in more than 12,000 ideas submitted in 2010 alone.²² At later stages of product development, an enterprise social network can facilitate beta testing by employees, thereby reducing the amount of time that is needed to obtain product feedback.

4.3 Operations and distribution

Using social collaboration tools can increase the potential information sources and speed of feedback from sales channels to drive demand forecasting. When an organization achieves the Holistic Integration stage and integrates B2B partners within a collaborative network, supplier and vendor input into demand forecasting will create additional efficiencies. By including distribution centers and warehouses in the social collaborative atmosphere and using real-time information transfer, an organization can improve the efficiency of its inventory control mechanisms.

4.4 Customer support

Through external social media, customer concerns are addressed through various forms of chat and messaging. Linking the data gathered through these interactions into a social collaboration platform provides easy common access to the data by the customer service division. The linkage between customer service employees allows them to efficiently access, share, and contribute to delivering solutions to customers.

4.5 Business support

Business support functions will benefit greatly from social collaboration tools and networks. Human Resources can use gamification via the enterprise social network to recognize and encourage employee

²² AT&T. (2011). "Innovating for Tomorrow."

performance. Organizations have been using virtual conferencing through systems such as Lync for several years. Incorporating these technologies as well as the developing 3D immersive technology discussed earlier into a social enterprise network will increase the ease and efficiency of communication throughout the organization. Lastly, using an enterprise social network will save significant time and money in staffing projects with the right people from the start.

5 Summary

At the time of this writing, there is no industry standard in outlining a social collaboration progression model. This paper seeks to provide such a model for the use of enterprise architects as they work with Fortune 500 CEOs and CIOs to develop strategic implementation of social collaboration technologies. The six stages identified in this paper represent a progression model that can be used to ascertain an organization's current state in the social collaboration paradigm and the basic requirements to move to the organization's chosen target stage.

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