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Executive Summary

“Transparency” in business means that stakeholders have visibility deep into the processes and information of an organization. This is becoming an important focus for businesses in several ways. Important qualities of transparency include the following:

- A requirement that is being enforced on markets and companies through regulation
- An enabler of better relationships with partners and customers (that is soon to be an expectation)
- A great opportunity to rework business processes to increase efficiency
- A risk to confidential intellectual property (IP)

Information technology (IT) can support transparency by providing a window into the data and processes taking place inside an organization. Systems that automate the collection and retention of detailed data can make compliance with reporting regulations less costly and burdensome, especially if they are flexible enough to adapt to changing regulatory environments. Software can also identify, abstract and visualize patterns in large data sets, providing factual support for management decisions down to a fine-grained level that can affect operational performance. Finally, Web sites, blogs, message boards and other public forums can provide customers and partners with channels of information and feedback that strengthen relationships and build trust.

There are several basic approaches to enabling transparency through IT. One could be called a system-centric approach, where IT systems are designed to deliver specific capabilities and meet specific business requirements. Workers and the organization then conform to the work practices imposed by the system. Organizations obtain the benefits of automated data retention, reporting, analytics for internal and external use, and processes for communicating with partners and customers, but at a cost in flexibility. This approach also puts IT administrators and integration consultants at the center of the business as gatekeepers for the continued modification and customization of system specifications, reports and end-user experiences.

Microsoft Corp. believes that as transparency becomes more and more critical to business success in the “new world of work,” organizations will be better served by software that gives information workers greater control over how they operate in a transparent environment. This means building retention and reporting capabilities for compliance into the existing information worker productivity environment rather than constructing a rigid new infrastructure; empowering IT in a governance role to set, administer and modify policies associated with transparency at the platform level while leaving business users in greater control of their own views into the data; and giving businesses self-service tools, with which to interact with their partner/customer ecosystem, that are rapidly adaptable to changing needs.
The New World of Work

Microsoft sees the next 10 years as a period of increasing global integration and rapid technological change. Organizations will operate more freely across borders as they seek new markets for their products and services and new sources of skilled information workers to replace retiring baby boomers. In this new world of work, transparency will play an important role in organizational success. How well or poorly organizations can achieve internal and external transparency through flexible information work systems will affect compliance costs, competitiveness and overall customer perception.

Reducing the Burdens of Compliance

Political trends are likely to diminish the frictions associated with international operations, but compliance with a patchwork of local government regulations will almost certainly remain a feature of the business world. Organizations that want to take full advantage of globalization therefore need ways to minimize the burdens of compliance — not just with one set of regulations, but within and across multiple, sometimes overlapping, regulatory environments.

Gaining Competitive Advantage

For businesses exposed to the rigors of global competition, the ability to innovate rapidly and achieve operational efficiencies will be critical to success. Organizations with the ability to discover new best practices and identify points of failure in workflows will enjoy an enormous advantage in product and service development, pricing strategy, customer relationship management and retention, and overall agility. The more closely organizations are able to observe, measure and draw insights from specific work processes, the more quickly and effectively they will be able to optimize those processes. However, organizations are likely to find they are more successful gaining buy-in from workers if they are straightforward about the purposes and expectations of performance metrics, and if the measurement technology does not require information workers to learn complex new skills or software.

Building Brand Trust

More choices and more information are making customers more sophisticated in their expectations of whom they do business with. Businesses operating in this competitive, information-rich environment need to closely manage perception and performance to build and maintain the value of their brand identity. This means being more open with customers and partners, taking greater short-term risks, and relinquishing some centralized control for the longer-term rewards of brand trust, reputation and loyalty.

Transparent for Markets and Governments

For the free-market system to function, investors need trustworthy information on which to base their financial decisions. As the complexity of business increases, so too does the risk that complexity will be used to mask dishonesty, or even innocently conceal implications of which investors should be made aware. Investors naturally can’t validate for themselves every piece of financial data reported by companies in their portfolios, so
they delegate the responsibility for oversight to auditors and government regulators in
the hopes of getting the clear, honest and concise information they need. Should these
market safeguards prove susceptible to corruption, deception, deliberate obscurantism
or other efforts at manipulation, however, the integrity not just of the dishonest
participants but of the market as a whole is threatened.

Experience of the past decade has shown that even the mature capital markets of the
United States are not immune from these sorts of problems. Each case of corporate
financial misfeasance — whether due to fraud or honest error — diminishes systemic
trust, increases risk and creates a more urgent requirement for transparency to protect
shareholders, the public and the integrity of the markets. In the late 1990s,
PricewaterhouseCoopers developed an opacity index that measures the economic
effects of risks associated with lack of trust and transparency. According to this model,
countries where investors fear dishonesty, corruption, arbitrary administration of laws
and policies, lack of standard accounting practices, and other uncertainties pay a
measurable economic penalty that affects the ability of their markets to attract
investment.1 Establishing trust through transparency is therefore an urgent necessity for
governments and capital markets that wish to draw investment to their member firms.

**A Challenging Regulatory Environment**
The U.S. government responded to the corporate scandals of the late 1990s with the
Sarbanes-Oxley Act (SOX), mandating tighter guidelines for disclosure of financial data
and making chief executives personally legally responsible for the veracity of their
corporation's reported results.2 Companies also must track and retain communication
and transaction data according to complex and specific requirements and be able to
produce that data in reports. Other governments either already have or are
contemplating similar regulations.

The economic dilemma is that the benefits accrue to the market system as a whole, but
the compliance and governance costs fall on individual firms. Technology is a key
component of those costs. According to Gartner Inc., in 2006 spending on IT financial
compliance management will rise to a level between 10 percent and 15 percent of the IT
budget.3 From an IT perspective, there is no ROI on compliance per se; there are just
penalties for noncompliance. As a result, many organizations see investments in
compliance as costs with few benefits. It's not strategic. It's just compliance, and there
are incentives to deploy the lowest-cost solution that meets current requirements.

The problem is that rigid systems designed only to meet specific compliance
requirements can expose organizations to higher costs in several areas. First, if
compliance requirements change, or vary by region, systems that are hard-wired to one
set of rules can be costly and difficult to modify. Second, and perhaps more important,
compliance technologies can impose a hidden tax on the productivity of information
workers if they require burdensome new practices.
Compliance and Information Work

Microsoft believes market transparency and compliance capabilities should be organic to the environment of information worker productivity and to the platform, not a patch to existing systems or a stand-alone solution with its own usage and governance issues. Microsoft offers extensive SOX compliance capabilities in Microsoft® Office, including the management of documents and information; automation of processes and workflow; communication and collaboration; and monitoring and reporting. SOX solutions built on the familiar Microsoft Office system can maximize the value of existing IT investments, be implemented quickly without disrupting the organization, empower process owners, minimize training costs, and fit seamlessly with existing IT architecture, allowing for adaptation to evolving compliance needs.\(^4\)

The advantages of building compliance capabilities into the information work application environment are to make it relatively easy to change the business rules for transaction monitoring, reporting and retention without reworking the entire technology framework and without the extensive participation of IT. This makes organizations far more resilient to changing regulatory environments and reduces the cost of operating in multiple regulatory jurisdictions with inconsistent requirements. Compliance activities take place largely in the background, invisible to information workers. Organizations and workers do not have to sacrifice the productivity or familiarity of the Microsoft Office environment to provide the comprehensive, auditable and trustworthy data necessary for market transparency.

Transparent to Workers and Executives

Transparency is often driven by compliance requirements, but its benefits do not end there. Decision-makers can use visibility into operational practices at a granular level to make continual improvements. More powerful networked systems for information work can provide metrics and metadata to give executives richer insights into areas such as structured tasks and exception handling, project management, document management, customer relationship management, and hard-to-quantify activities such as teamwork.

Likewise, information workers can be more productive when they understand how their work aligns with larger business objectives. Systems that allow workers to visualize social networks, publish and subscribe to unstructured communication channels (e.g., blogs and discussion groups), and identify and propagate best practices in their own areas of expertise can enhance personal and organizational productivity.

Technology can enable intra-organizational transparency in two ways: through open, voluntary participation and through the automated gathering and reporting of data from business applications that workers use. Each model has its benefits and drawbacks.

Employee Participation

Open participation through new workplace-based social networking technologies can lead to rapid and exciting breakthroughs based on pooled knowledge and experience of the people closest to the business processes. Examples of these technologies include
employee portals, communities of practice (where experts within or across organizations can exchange ideas informally in threaded news, e-mail and discussion groups), blogs (self-published, often informally organized Web pages expressing personal and professional insights of the author) and expertise location services (search engines that discover personal contact information of document authors and experts along with the documents themselves). Don Tapscott and David Ticoll, in “The Naked Corporation,” identify a number of areas where openness as a cultural value can promote greater identification of employees with organizational objectives, better worker morale, and improved information for decision-makers as a result of workers being more willing to be candid and honest in communications with peers and managers.\(^5\)

Unfortunately these benefits are notoriously difficult to quantify. In addition, firms run the risk that too much knowledge-sharing in the name of transparency generates more heat than light, distracting employees from their specific focus without establishing a reliable process for the creation of new value. In some organizations, empowering a bottom-up transparency model is a zero-sum game at the expense of management control. Many traditionally hierarchical organizations may not find the benefits of transparency to be worth the cultural costs. Finally, there is the question of legitimate confidentiality and IP protection. Some information is not appropriate to share, either within or outside an organization. Even the most permissively transparent organization must and should have its opaque areas and the means to strictly limit and monitor the distribution of private information.

**Transparency and Visualization in Structured Workflows**

Structured information work in areas such as call centers, help desks, order-taking, project management and some types of product and document development are much easier to quantify and make transparent. Often the systems that support structured information work include capabilities for sophisticated measurement of worker practices. However, if these systems are proprietary, it can be difficult to expose the data necessary to generate a cross-enterprise strategic view of overall productivity across processes and systems.

Web services architectures (WSAs) are beginning to solve this problem. WSAs expose data from different systems in a common schema, where they can be presented to end users in a single interface — either in a portal or through a front-end application such as Microsoft Excel\(^\circ\). This information can be presented to decision-makers in a consistent format such as an electronic form, executive scorecard or digital dashboard to provide real-time, at-a-glance data about enterprise performance. Executives can then use visually oriented workflow design and management tools such as Microsoft BizTalk\(^\circ\) to make high-level adjustments to workflow and business rules, while the application negotiates the back-end system modifications automatically.

New visualization technologies will provide managers and executives with better tools with which to see into processes. Vivid large-scale displays can present visual information with greater clarity and resolution. Faster processors and distributed computing enable the rendering of abstract organizational models as interactive
multidimensional objects that users can examine and manipulate. This mode of interacting with complex data in real time will be second nature to a generation of information workers raised on increasingly sophisticated video games and simulations.

**Using Data to Optimize Processes**

Automated data monitoring avoids many management uncertainties of more participative systems and provides quantitative and qualitative information for executive decision-makers. Used properly, the insights derived from close observation of work practices can generate meaningful process efficiencies in areas as diverse as reducing call times in call centers to shortening product development cycles. Applying pattern recognition and visualization tools to metadata drawn from structured workflow applications can identify common points of failure and make the handling of workflow exceptions more routine. The same technology run against metadata from communication and collaboration systems (such as e-mail, instant messaging and team sites) can assist in the identification of effective teams, identify collaborative practices that are more likely to result in the creation of added value, and measure the productive utilization of collaborative technology to establish ROI.

The principle drawback is that many workers, particularly information workers, are resistant to what they see as “big brotherism” in the workplace — unless their expectations are set ahead of time and they embrace the business justification for the collection of information. Surrupitious or unduly intrusive monitoring can have a markedly detrimental effect on workplace morale and corporate culture, and can engender feelings of hostility among workers that can redound strongly against employers. The more that authority and discretion is traditionally associated with the information-work role, the more likely a negative reaction becomes and the more resources are available to the worker for effective retaliation (e.g., whistle-blowing or disclosure of organizational “dirty laundry” on Web sites).

Regulatory compliance can help reduce this friction and make it easier for organizations to collect and use information related to employee practices and processes in other business contexts. Often this kind of information could be very useful in creating efficiencies or convenience for workers and the business. However, organizations may fear that workers would find that kind of monitoring overbearing if it were imposed solely at management’s discretion. Higher levels of regulatory scrutiny imposed externally by governments or markets set expectations that are non-negotiable. Knowing that their employers must monitor certain data, workers adjust their behavior accordingly. It is then a much lower barrier for organizations to use data they are collecting anyway.

**Transparent for Partners**

Another area where transparency is increasing is supply-chain processes. Globalization and increasing connectivity are driving many businesses to adopt more federated and decentralized models for a variety of activities, from traditional supply-chain management to project-based engagements with outside experts. Organizations in a global competition for price, quality and talent benefit from ways to extend deep visibility
into their processes for outside partners because this visibility promotes more rapid, relevant response to business needs.

For organizations dependent on just-in-time relationships with downstream vendors of parts and services, providing transparency into the specific processes enables partners to proactively anticipate demand, adjust their own processes and reduce costly lags, friction and uncertainty. Many businesses already provide extranets and application-level integration to partners to assist with forecasting, order-tracking, billing, information-sharing and person-to-person communication.

**Barriers to Transparency**

Often, however, these systems do not provide the full measure of transparency and value because of concerns over proprietary IP and system security. Sometimes the integration of heterogeneous systems entails costs and complexities greater than the immediate benefits. Sometimes corporate culture is resistant to partnership or keeps distance in business relationships through restricted access to outsiders.

Technological innovation can help reduce many of these barriers to formal and informal collaboration with partners by giving organizations more precise ways to manage the level of transparency they permit to partners, increasing not only the comfort levels for partners but their willingness to participate as well.

**Information Technology Solutions**

Smarter, more context-aware systems will soon use machine-learning and pattern recognition to negotiate transactions at the system level without extensive participation of IT administrators or system integrators. Emerging standards in data interchange and the increasing migration to Web services-based architectures for interoperability will also reduce many of the practical barriers toward interorganizational collaboration at the system level.

Organizations will also be able to facilitate more secure and controlled relationships with vendors and partners through the adoption of more sophisticated information rights management (IRM) technology. Currently, document-level security via IRM, such as that offered by Information Rights Management in Windows Server™, gives organizations control over who is permitted to read, modify, print or redistribute individual documents even after they filter beyond the firewall. Microsoft believes this sort of IRM will become even more precise as the technology evolves, allowing users and administrators to designate role-based permissions on content down to the level of individual sections or words in documents, spreadsheet cells, slides in a presentation, or contact/presence information in an e-mail header.

This next-generation IRM will not only enable more finely grained security policies over content, it will enable the process of rights management to be automated and customized to the roles and requirements of individual readers. Documents managed with this technology would automatically redact confidential data if a user’s permission level did not entitle him or her to view it, but would leave nonproprietary information
intact. This means that organizations could manage one set of documents and one set of IRM policies for their entire archive of information. Server-based cross-enterprise identity management systems would interface with the IRM service to automatically present the right “version” of any document to each reader, exposing permission-based content to partners and concealing that which is designated confidential or inappropriate for that role or relationship.

Organizations equipped with these capabilities would no longer face steep trade-offs between the benefits of transparency within partnerships and the need to maintain IP security. Businesses could be transparent by default to take full advantage of the open, networked global environment while significantly reducing risks to IP.

Transparent for Customers

In a more global, interconnected economy, consumers and business partners will have more choice over whom they do business with and how business is transacted. Commercial applications of the Internet such as commerce portals and business search services already provide customers with significantly more market data and choice, but the scope of information is usually limited to the traditional concerns of product specifications, price, availability and quality. Web-based e-commerce offers a panoramic view of the global marketplace but promotes only a limited dimension of transparency.

Trust, Context and Reputation

What’s missing in business relationships is context. Customers increasingly want more than basic transactions: They want a relationship with a trusted vendor. This element of trust is especially important in a venue such as the Internet, where face-to-face contact is rare and many suppliers have weak to nonexistent brands.

Companies such as eBay Inc. and Amazon.com Inc. have developed ingenious methods for investing trust in otherwise anonymous online transactions. One could say that these innovations in trust- and community-building — more than their basic service and infrastructure — represent the vast majority of their value in the market. eBay users amass reputations based on how their transaction partners rate their performance. These reputation scores are publicly associated with every site user and are often enormously influential in how buyers and sellers behave in auctions. Amazon enlists its book-loving customer base as independent reviewers, assigning ratings to products that guide subsequent customers and can dramatically affect sales on the site.

The credibility of both these systems comes from their absolute transparency and bottom-up quality. Users trust each other in the aggregate more than they trust any single partner individually. Good traders, good books and best practices get rapid and broad exposure; bad actors are quickly singled out and avoided by the larger community before they can damage the integrity of the system.
Trust and reputation systems can also be automated, taking user actions as proxies for intentional choices. Current Web search technology counts click-throughs as votes for site relevance, aggregating the individual behavior of millions of users into a scheme for assigning ranking and relevance to often voluminous query results.

Both intentional and automated reputation systems are being integrated into enterprise search and portals as well as B2B and B2C environments. This trend has many beneficial implications for information work. Searches become increasingly exact and relevant, reducing the large number of hours information workers spend looking for information to do their work. Reputation systems can have the same heuristic effect in exposing organizational best practices and star contributors (as well as weeding out duds) as they have in the consumer market, and they empower every site user to contribute wisdom and insight on the validity of strategies and the usefulness of resources. Trusted relationships based on transparency within and across organizations are far more likely to yield greater productivity and business value than those where authority is assigned arbitrarily (and perhaps inappropriately) to people, practices and information.

**Corporate Citizenship**

One change with broader implications is that trust systems are extending beyond the realm of economics. Some analysts forecast that consumers will begin using that leverage to promote corporate behavior along lines that aren't strictly economic, such as environmental practices, labor relations and general corporate citizenship.⁶

As corporations and large organizations assume a greater influence in the day-to-day lives of people around the world, many people want ways to hold them accountable similarly to how elections hold political power-holders accountable. However, unlike governments, which are instruments of popular sovereignty, corporations exist to serve the economic interests of their shareholders. If that mission is seen as conflicting with community priorities or other values, customers will increasingly seek means of redress. Since corporate democracy is limited to shareholders voting in proportion to their equity stake, and it can be both legally and practically challenging to obtain relief through government action, consumers are left to vote with their one potent weapon: their business.

Of course, this has always been true. What's different is that new technologies are affording consumers unprecedented access to information about businesses to motivate their actions, and rapid, powerful ways to coordinate their actions, on a global scale if need be. Tools such as social networks, blogs, chat rooms and reputation systems that rank companies according to criteria of interest to specific customer groups help consumers and advocacy organizations level the playing field with corporate marketing departments by rapidly propagating news, impressions and information through vast, and largely trusted, channels.

Used effectively and responsibly, “netroots” campaigns can create enormous pressures for accountability and have already forced corporations to respond to unexpected
challenges. In November 2005, Sony Corp. was forced to withdraw a digital rights management application it had secretly embedded in some of its commercial CDs that installed itself on customers’ computers, sometimes causing unexpected problems. A single user posting on a technical blog site identified the problem, traced it back to the Sony CD, and ignited a firestorm of consumer resentment almost overnight. As irate customers were joined by popular recording artists unwilling to publicly support Sony’s strategy, the company made a series of withdrawals before finally capitulating entirely on an issue it saw as central to its ability to protect its revenue streams from IP assets.

The lesson here is that businesses operating in an immediately transparent environment will need to be far more open and responsive to customers on a range of issues to win the trust necessary for a successful brand. The alternative — counting on secrecy and public inattention — is unlikely to be as effective as it was in the past.

From an information-work perspective, workers and management will need to consider the implications of even straightforward decisions from the perspective of public impact and customer opinion. In an atmosphere where internal communications and confidential documents could become suddenly and embarrassingly public, organizations need to internalize values of honesty and responsiveness. Strategies such as pre-emptive disclosure, ombudsmen and internal customer advocates, corporate citizenship initiatives, and a general default stance toward transparency can go a long way to reduce friction between commercial players, their customers and their communities.

Technology and Practices in an Age of Transparency

The need for companies to be accountable to shareholders, markets, governments, customers and communities is driving an irresistible trend toward transparency as a means of building trust into a system populated by self-interested participants. Organizations can view this as either a challenge or an opportunity; however, it is no longer a choice of whether to respond, but rather of how best to respond.

Information work technology can help streamline processes such as compliance and mitigate cultural impacts related to participation, performance monitoring and decentralization of decision-making.

- By automating monitoring, retention and reporting of corporate records as mandated by law, IT can speed and simplify compliance without affecting the productivity of day-to-day information work.
- Collaborative technology, smart content and centrally managed information rights policies can help organizations be as open as possible to meet public expectations while safeguarding confidential IP and sensitive competitive data.
- Employee portals with integrated capabilities for expertise location, communities of practice, net meeting sessions, and other rich communication and collaboration can help foster productive information-sharing and a culture of participation.
• Pattern recognition and visualization technology applied to data and metadata gathered from close measurement of routine work activities can be used to build feedback loops for the constant optimization of practices.

• Reputation systems, polls and other informal, bottom-up technologies can rapidly expose best practices, improve the relevance and performance of search technology, and validate expertise.

• Blogs and informal media channels provide organizations with early warning systems about ideas gathering strength and can be barometers of trust and accountability in a world in which organizations face unfamiliar tests of their freedom and authority from empowered consumers.

Microsoft is committed to supporting companies in their efforts to adapt to the more transparent new world of work by bringing these technologies to information workers in the familiar, contextual productivity application environment.
End Notes


2 A guide to the provisions of the Sarbanes-Oxley Act can be found online at http://www.sarbanes-oxley-forum.com.


6 ibid.


At Ignite this week, we’re announcing many new features and capabilities to empower every person and every organization to thrive in the new world of work. We want to help. At Microsoft, it’s our mission to empower every person and every organization on the planet to achieve more. Today at Microsoft Ignite, we’re announcing scores of new features and capabilities that aim to do just that.

But in this age of accelerated transformation, helping our customers achieve more also requires a broader view. So we’ve committed to becoming the world’s best students on the future of work, closely studying our own telemetry, and working closely with customers and researchers across every field, to understand our challenging new reality. So, by being transparent organizations have only to gain in terms of corporate image and a possible choice of entry for new recruits with good caliber. Cite. 1 Recommendation. So in short shoot organisations be transparent to a close sell to the customer definitely use. An informed customer cannot blame the supplier for any risks after being warned. Cite. Information systems need to supply allergy by work it possible to trace a piece of information back to its author. The information becomes more reliable. Regards. KS Al-Niaeem. Even the World Economic Forum has set up a Global Agenda Council on New Models of Leadership (2012â€“2014). This council was convened to create an in-depth dialogue about the extent and likely impact of these changes. From now:land to next:land. Nevertheless, most organizations still rely on a way of working designed for the industrial age. Their operating models have barely changed since they were invented over 100 years ago. With the new method of extreme programming (Kent Beck) or so-called DevOps (Andrew Clay Shafer & Patrick Debois) these organizations drove new, highly profitable â€œsoftware minesâ€​ into the rocky ground which fundamentally changed the landscape.

These are the methodological foundations which are summarized today under the term, Scrum. The McKinsey Global Institute explores how technologies like automation and artificial intelligence are shaping how we work, where we work, and the skills and education we need to work. Featuring conversations with experts from the McKinsey Global Institute and thought leaders from the public and private sectors, this series will help business leaders, policymakers, and organizations understand what changes are afoot and how we can prepare today for a future that works. Latest episode. How can business leaders make the new world of work better for people? June 14, 2018 â€“ John Donahoe of ServiceNow and Jeff Weiner of LinkedIn speak about how businesses can play a role in improving work for people in the age of automation and artificial intelligence.