How Collaborative Technologies are Transforming Financial Services

Strategic White Paper

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Collaboration in financial services

Money is information. As the fastest adopters of new information technologies, the financial sector has helped to drive multiple waves of change across all industries. Information dissemination has always been at its most advanced in financial applications, with market data screens making their way into both institutions and clients from the 1970s. The commercial implementation of many other new technologies, from the Internet to grid computing to biometrics and beyond, is being driven by the financial industry.

The current vanguard of change in business technology is centered on collaboration. The architecture of business technologies has fundamentally changed over the last five years. This has been epitomised by the development of XML (eXtensible Markup Language) and web services. XML has provided a foundation for easy exchange of formatted information between systems. Web services build on XML to enable applications running on different systems to be integrated. These twin standard technologies, along with numerous related developments, have created an environment in which any systems, applications, or workflow can be integrated into a seamless whole.

At the same time, the deeper knowledge specialisation required in a highly advanced competitive business environment means that professionals must work with others to achieve outcomes. These pressures not only change how work is done inside organisations, but increasingly means that collaboration outside company boundaries is essential. This collaboration can be with other financial market participants, clients, and even competitors.

For financial institutions, the rise of collaborative technologies poses both opportunities and challenges. The promise is one of bringing together the expertise found in large, distributed organisations to create highly efficient yet differentiated outcomes and processes. There is the potential to effectively lock-in clients by creating high-value collaborative outcomes and integrating these into client's processes, enabling firms to create superior value from competitors. Risks can be assessed and managed more effectively, helping to optimise capital allocation across the firm.

However these rewards are not easily gleaned. Regulation and compliance issues block initiatives, security concerns are paramount, and the reality is that collaborative behaviours are needed to complement the enabling technologies. However this does not mean that financial institutions can ignore the potential of collaboration, inside their organisations or across their industry. Rather it means that the ability to overcome these challenges, and implement and participate effectively in collaboration initiatives, will become increasingly central to gaining competitive advantage and maximising profitability.

Markets and real-time collaboration

There were two groups that stood out as the first to use instant messaging (IM) to communicate faster and more effectively with their peers: teenage girls and bond traders. For traders and salespeople in fast-moving markets, in which enhanced information flows could result in better timing and more profitable trades, there was no question about immediately taking up this useful tool. Soon traders across most US financial markets were using IM to exchange information with their peers and

clients, with many having multiple IM windows open on their desktops in order to keep information flowing swiftly in all directions.

However what was good for individual traders was not necessarily implemented in a way that worked well for organisations. Regulation requiring audit trails on all communication meant that the public IM platforms such as AOL, Yahoo! and MSN that were adopted by traders were not acceptable in their raw form. While UK regulations have not kept pace with the US on this front, most institutions see retaining records of all IM communication as essential. However the IM gateway offerings that have emerged over the last years mean that public IM platforms are now readily useable in a financial industry environment, and can be considered robust and secure. Interoperability issues remain, though recent progress on this front is promising.

The real power of real-time collaboration is still to unfold. The distinguishing and most valuable aspect of IM as a communication medium is its presence functionality, which enables users to know whether their counterparts are currently available. The first phase will be for this presence function to become embedded into richer communication forms such as videoconferencing, webconferencing, collaborative analytics, and other emerging communication tools. When the presence function of IM is embedded across software applications and business processes, this will allow people to access and engage real-time with relevant people on an as-needed basis. This will result in a dramatic shift in the nature of how work is done within and across firms, ranging from fast-moving environments such as markets through to less time-sensitive, though equally critical, business functions.

Deals and collaborative workflow

Major financial transactions such as mergers & acquisitions, initial public offerings, and capital restructurings are the most document-intensive tasks in business. For example, M&A deals involve an average of 15,000 documents. To compound the challenge, these highly complex deals always involve multiple parties, including at least the client corporation, an investment bank, and a law firm, often other professional services providers, or even multiple representatives from each sector. The issue is how to get effective collaboration when complex workflow across organisational boundaries is required.

The reality is that these complex tasks are still largely executed with email. The legion of problems with versioning, copy lists, leakage of confidential information and more do not seem to put off bankers and lawyers whose primary interface to the world seems to be their email inbox. The potential is for systems that enable faster due diligence processes, more efficient document and prospectus generation, lower risks, better distribution and pricing, and many other benefits for all participants.

The insurance industry encounters related issues in its work. While the transactions are sometimes less glamourous than the cut and thrust of M&A, a similar kind of workflow is at the heart of the industry. Workflow used to be thought of as largely process automation, however the focus is increasingly on how knowledge workers are connected to create business results. This is not about making people redundant, but about leveraging the collective capacity of specialists. The flow of work in complex knowledge-based work is significantly informal. Social network analysis shows that workers are roughly five times more likely to ask people than to refer to online or paper sources when they need critical information. Optimising workflow in complex environments is almost all about enabling effective collaboration, as and

when it is required. Financial institutions need to implement systems that will enable collaborative workflow both inside their organisations, and often also across boundaries with clients, outsourcing providers, partners, and others.

Integrating collaboration and compliance

The single most powerful message from the *Collaboration in Financial Services* conference held in New York in September 2004 was that compliance is the number one issue on US banks' minds. Everything must be done with compliance in mind. However as former SEC Commissioner Steven Wallman forcibly expressed in his keynote address to the conference, overemphasis on compliance will stymie the innovation that drives markets and economies. Those firms that allow compliance concerns to stop rather than to shape their collaboration efforts are in danger of losing competitive ground that will be hard to make up.

Recently the *Financial Times* reported that banks are in risk of insider trading by sharing information inside the bank on credit derivatives. Trading in credit default swaps has always being done based on the privileged knowledge that banks have of their clients. Now banks are being told that if they want to trade these instruments, the parts of the bank that know their corporate debt clients well, can't talk to the parts of the bank that trade these instruments. In the first instance, given that this development represents a broad, long-term trend to regulation on similar issues, this suggests that diversified financial institutions – which are based substantially on sharing knowledge between their operating divisions – may have less justification for existence than in the past.

Every organization is experiencing the imperative of collaboration. To survive, we must enable information flows and collaborative work. At the same time, there are many ways in which we must disable communication and information flows, inside and outside the company. This is particularly pointed in financial services, with old and new regulations constraining who can share information, from investment banking and research, to lending and trading. However similar dynamics apply to companies in every industry in that they both have to actively share information, and also have constraints from intellectual property, privacy, regulation etc., in how they work both internally, as well as with suppliers, clients, and other external partners. This tension between encouraging and constraining collaboration and information flows will be central to the evolution of organisations, especially in the financial sector, over the next years and decades.

Good and bad behaviour

Collaboration (from *co-laborare*) literally means "working together". While collaborative technologies from the simple to the cutting edge enable many ways for individuals and organisations to work together, the reality is rarely so smooth and easy. A minority of financial institutions have a culture that could readily be described as "collaborative," despite the internal and external rhetoric. In some sectors a "star culture" still holds strong, while in others, sharing knowledge is not something people do from self-interest.

The path of culture change has no final destination. There is never a point at which organisations can declare they have a completely collaborative culture and can relax any efforts to improve further. Initiatives to develop greater collaboration must run over a number of years – that is the only timeframe in which substantive change is possible. One-shot efforts are usually a waste of money and resources. Despite the

obvious challenges of making bankers and brokers shift to a more collaborative spirit, it is not a question of choice. Unless firms can improve how they bring together the talents of individuals and teams to create value for clients, they will find it increasingly difficult to compete against those that do this well.

Which way financial industry structure?

At the highest level, there is no question that collaborative technologies will impact the structure of the financial services industry. The implications may take some time to be visible, however the shifts in power and value creation between industry participants are already evident.

One of the most obvious examples is in the relationship between buy-side and sell-side in financial markets. The availability of information and the concentration of analytic capabilities in the buy-side has shifted the balance of power, and made the value proposition of financial market sales activities ever more tenuous. In considering the future of the bank dealing room, some believe that much of the activity will shift to online trading, requiring far fewer traders and salespeople. However if salespeople can create value collaboratively with their clients, this can significantly change the dynamic at play.

Collaborative trade and portfolio analytics, in which buy-side and sell-side collaborate in how they assess trades, is likely to be a significant aspect of changing relationships. Investment banks increasingly offer tools that allow clients to assess potential trades based on their own assumptions and market perspectives. Sometimes these allow the salesperson and client to simultaneously view trading strategies while adjusting trade parameters and discussing the implications, making the client decision-making process highly collaborative. The step beyond this is assessing the trade specifically within the context of the client's portfolio, including impact on portfolio-wide risk measures. In some instances these calculations can be done on the bank side, requiring the client's portfolios to be available on the bank's systems or at a third-party application service provider (ASP). If banks cannot clearly demonstrate that they can create superior value for their clients in their interactions, clients will not waste their time speaking with salespeople, and the banks' key relationships will suffer. This illustration of how relationships are changing in financial markets can also be seen in other client relationships, where banks have a choice between becoming commodities or seeking to create value collaboratively with clients.

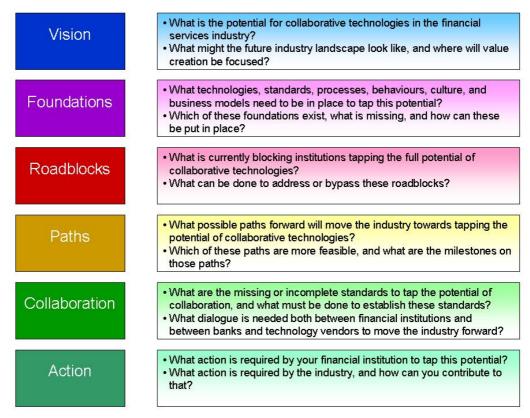
A roadmap for industry leadership

Many of the critical issues in tapping the potential of collaboration in financial services lie at the level of the industry as a whole rather than individual institutions. For instant messaging to be a tool that enables information flows across markets and institutions, agreement on issues including platforms, compliance, security, and open corporate directories is necessary. In the transaction and collaborative workflow space, a whole host of issues need to be addressed in order to tap the potential of the technologies. These include platforms, document tagging standards, industry taxonomies, information shared in specific types of transactions and far more. The slow yet steady growth in the maturity and usage of XML and web services will be a strong enabling factor.

The framework below, *From Vision to Action*, identifies the steps required to tap the potential of collaborative technologies in financial services. This potential will be

different in each sector of what is a broadly diversified industry. However this potential should in all cases be compelling enough for institutions to go through the steps, identifying the foundational enablers, the roadblocks, the possible paths around the roadblocks, the industry-wide collaboration that is required, and finally the clear action steps that will move industry participants towards the true potential of collaboration in financial services.

These steps will not happen by themselves. Leadership is required. Leaders who put in the energy and take others with them on the worthwhile path forward will certainly create value for the industry as a whole, but far more for themselves, as they help to construct a business environment which perfectly suits the competences and capabilities they have developed. Clearly, the years ahead will offer many challenges to financial institutions, yet there are also massive opportunities for those that can apply collaborative technologies to create greater value for both themselves and for their clients.



From Vision to Action - A Practical Framework