

# COLLABORATIVE MESSAGING FOR THE FINANCIAL INDUSTRY

by

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## **Abstract**

Global Relay Communications is a Vancouver based company offering online compliance archiving services to the financial industry. The company is interested in growing its existing customer base and expanding new revenue streams through the development of a new collaborative messaging platform for regulated financial firms. In order to accomplish this goal, Global Relay will need to leverage its existing Message Archive product by embedding it into an Instant Messaging platform, specifically tailored to meet the compliance requirements of financial firms.

This report analyzes current Instant Messaging trends in the financial community and examines IT adoption rates of collaborative software applications. An online community lifecycle model is then presented with key success factors to help Global Relay achieve a level of critical mass for its potential new product offering. By combining the market analysis with an online community framework, this report is able to provide a clear business model while taking into consideration the company's core competencies and strengths. The primary mode of distribution for achieving strong network effects for this new product will be top down through key vendors, suppliers and partners.

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## **Glossary**

<b>AES</b>	Advanced Encryption Standard is a symmetric-key encryption standard adopted by the U.S. government
<b>FINRA</b>	In the United States, the Financial Industry Regulatory Authority is a private corporation that acts as a self-regulatory organization responsible for financial regulation of member brokerage firms and exchange markets
<b>Hosting</b>	Making content (usually website or software) available via the internet
<b>HTTP</b>	Hypertext Transfer Protocol is a networking protocol for distributed, collaborative, hypermedia information systems and is the foundation of data communications for the world wide web
<b>IM</b>	Instant Messaging
<b>IM Client</b>	Software applications that enables the user to engage in instant messaging
<b>IM Gateway</b>	Client software composed of an IM application, which may connect to multiple IM networks
<b>SaaS</b>	Software as a Service is a delivery model in which software and its associated data are hosted centrally (typically in the internet) and are typically accessed by users using a thin client, normally using a web browser over the internet
<b>SAML</b>	Security Assertion Markup Language is an XML-based open standard for exchanging authentication and authorization data between security

domains, that is, between an identity provider (a producer of assertions) and a service provider (a consumer of assertions)

**SEC** The U.S. Securities and Exchange Commission is a federal agency, which holds primary responsibility for enforcing the federal securities laws and regulating the securities industry, the nation's stock and options exchanges, and other electronic securities markets in the United States

**TCP** Transmission Control Protocol is one of the core protocols of the internet protocol suite that provides reliable, ordered delivery of a stream of bytes from a program on one computer to another program on another computer

**Web 2.0** Web applications that facilitate participatory information sharing, user-centered design, and collaboration on the World Wide Web

**XMPP** Extensible Messaging and Presence Protocol is an open-standard communications protocol for message-oriented middleware based on XML (Extensible Markup Language)

# **1: Introduction to Global Relay Communications**

Global Relay is a market leader of hosted electronic message archiving systems for the financial sector. The company is headquartered in Vancouver, British Columbia and has over 130 employees with office locations in New York, London and Singapore. Global Relay is a fully bootstrapped, private, employee controlled company with no reliance on venture capital. The company is heavily focused on long-term organic growth, as opposed to short term exit strategy. All the primary shareholders have been fulltime employees since the inception of Global Relay in 1999 and have successfully helped the company grow strong year over year profitability for the past six consecutive years. Built on a reputation of customer service, technical expertise and niche industry focus, Global Relay has delivered hosted electronic message archiving services to the financial sector for over twelve years and has never lost a single instance of message, or experienced a breach of security. Some notable customers include Chicago Stock Exchange, Chicago Board Options Exchange, divisions of General Electric and Mitsubishi, and over 1000 Prime Brokerage Hedge Funds.

## **1.1 Company Background**

During its start-up phase, the primary founder of Global Relay recognized a growing need for electronic message archiving due to increasing volumes of email transactions over the internet between small to medium businesses and enterprise organizations. It was only a matter of time before companies would become constrained

by their electronic message storage capacities and email recovery limitations. However, near the early stages of Global Relay's inception, there was very little demand for online message archiving; it was difficult to even give the product away for free, let alone generate a profit. Back then, Global Relay did not yet have the reputation or credibility to approach a broad audience base with its service offering and was struggling to stay afloat. Like most start-up companies, Global Relay had very limited resources at its disposal. With only four employees, minimal capital, and a first generation product, it was difficult to spark interest or generate demand for a product that had such a promising future. What Global Relay needed at this stage of its product lifecycle was a beachhead industry that would value the ability to capture, archive and restore all electronic data communication from an offsite environment. Therefore, in order to survive, Global Relay needed to find a niche community whose electronic message storage needs were not being met and tailor its product to specifically address the requirements of this community.

Fortunately, the turn of new millennium brought forth an extremely lucrative business opportunity for Global Relay. Although catastrophic for investors, the financial scandals of Enron and WorldCom were a true blessing in disguise for a small Vancouver based technology firm in need of a beachhead industry to adopt its services. The lack of adequate electronic message regulation and supervision within the financial industry resulted in losses in the billions for investors. Rogue traders could essentially indulge in insider trading via their email communications without getting caught because no internal protocols were in place to monitor or supervise these electronic channels. For example, a stock broker could easily email confidential information to a potential prospect then

delete the message from his sent folder and essentially eliminate any trace of that communication.

In a new era heavily driven by electronic data communication such as email, these types of illegal communications eventually led to new federal legislation under the Securities and Exchange Commission for electronic data messaging protocols within the financial community. Consequently, electronic message archiving transpired from a “nice to have” product to a “need to have” product overnight. By realigning its strategic focus to address the new electronic message compliance requirements of the financial sector, Global Relay rapidly grew from a small startup company into an internationally recognized organization that now services over 14,000 financial firms globally, including 23 of the world’s top 25 banks.

## **1.2 Industry Overview for Electronic Message Archive Services**

Electronic message archiving refers to the capture, retention and supervision of all electronic communication types such as email, email attachments, electronic fax, instant messaging (IM), text messaging, and even social media to name a few. There are many archiving vendors today that provide hosted message archiving products, which allow companies to aggregate all their electronic communications into one central repository. According to Gartner, the primary drivers for hosted electronic message archiving are usually compliance, records retention, supervision, legal discovery, and mail server data management (Couture, 2009). Therefore, the primary target markets for this product are regulated firms in the financial industry such as Investment Advisors, Hedge Funds, Broker-Dealers and Banks.

Electronic message archives help financial firms ensure that their employees are not engaging in insider trading, providing false claims or misleading information to investors, such as promising a guaranteed return on investment. One does not need to look any further than the financial meltdown of 2008 to recognize the severe consequences that misleading communication can cause within this industry.

The greatest demand for electronic message archiving can be found in the United States financial sector for compliance regulatory purposes. Financial entities are regulated by government and non-government bodies such as the Security Exchange Commission (SEC) and the Financial Industry Regulation Regulatory Authority (FINRA). According to rule 17a-4 of the SEC, the Commission has required that broker-dealers create and maintain certain records so that, among other things, the Commission, self-regulatory organizations ("SROs"), and State Securities Regulators (collectively "securities regulatory authorities") may conduct effective examinations of broker-dealers (<http://www.sec.gov/rules/final/34-44992.htm>). This essentially means that financial firms need to retain all their electronic data and communications for a specific period of time. This data must also be fully recoverable and searchable within a specific period of time if requested by an SEC or FINRA examiner.

According to industry analysts the worldwide email archiving market continues to be one of the fastest-growing IT markets, with growth projections from \$2 billion in 2009 to over \$5 billion by 2013 (Curtis, 2010). There are two categories of offerings: on-premise and hosted. On-premise solutions have had the bulk of market share until recently (75% in 2009); however hosted service-based solutions have been rapidly capturing more market share due to lower costs and more flexible deployment

capabilities (Hill, 2011). Small to medium sized enterprises, especially in the financial services sector, are most likely to use hosted solutions, as they lack the in-house resources and capabilities to manage archiving and compliance functions internally (Hill, 2011).

While regulatory requirements have been the driver for much of the growth in this industry over the past few years, the recently approved Dodd-Frank Wall Street Reform and Consumer Protection Act is expected to introduce significant changes across the entire financial services industry. These changes will force many more firms to invest in archiving and compliance capabilities to meet the requirements of the legislation (Hegarty, 2011). Hosted services will provide the most cost-effective means for the industry to implement the required IT infrastructure.

Key characteristics of the compliance archiving market include the following:

- Substantial growth is expected, especially in the US financial services market due to increasingly stringent regulatory requirements
- An increasing trend towards hosted solutions, due to costs and more assured compliance
- A trend towards vendor consolidation, due to ever increasing complexity
- Demand for seamless management and search capabilities over multiple forms of communication and high volumes of data

### **1.3 Competitors**

Although there are a couple dozen vendors that provide hosted archiving services, the top three leaders based on market share worldwide are Global Relay, Smarsh and LiveOffice. By the end of 2008, other larger companies acquired a number of hosted

message archiving vendors and those that remained began to see healthy year after year growth in revenue. In particular, Global Relay generated approximately \$10 million in annual sales revenue in 2008, while LiveOffice generated around \$20 million in annual revenue (Murphy, 2008). According to Gartner in 2009, Smarsh had approximately the same market-share as Global Relay (Couture, 2009), which would also place them around \$10 million in annual sales.

As the electronic message archive industry begins to move into the early adoption stage of its product life cycle the following acquisitions occur: FrontBridge is acquired by Microsoft (Fried, 2005), EVault is acquired by Seagate (Mann, 2006), Zantaz is acquired by Autonomy (Times Online, 2007), Postini is acquired by Google (Riley, 2007), and MessageOne is acquired by Dell (Storage Newsletter, 2008). The only three organic providers that remain are Global Relay, Smarsh and LiveOffice. Compliance message archiving continues to be the core competency for these three providers whereas the remaining competitors pursue focus on other services of their product offering for revenue growth and only position hosted message archiving as a value add-on to their core product bundle.

With high growth expectations, both Global Relay and Smarsh position themselves as market leaders in the financial services sector by focusing on electronic search and compliance tools targeted towards Chief Compliance Officers (CCO). These are the individuals responsible for ensuring that internal governance policies are being followed within an organization. LiveOffice on the other hand has drifted away from the driving needs of CCOs and is forced to realign its target market and strategy. It begins to focus on email archive management for small enterprise organizations (under 30 users)



and decides to compete heavily on price thus commoditizing its services through low margins and high transactional sales volume. Things now begin to look very positive for the three market leaders of hosted message archiving; sales are on the rise and demand forecast is high due to increased regulatory requirements in the financial sector.

#### **1.4 Core Offering and Business Model**

Global Relay provides hosted electronic message archive systems to financial institutions that need to adhere to stringent regulatory compliance requirements as mandated by the SEC and FINRA. The company's core product offering is the Message Archiver. This product provides customers with the ability to retain, search, supervise and extract all their electronic business communications from one central repository. Unlike manual tape backups or other generic archiving tools, the Message Archiver provides a seamless end to end solution specifically designed for regulated financial institutions.

Global Relay's archiving system achieves unsurpassed search and retrieval speeds due to its hybrid database/search engine infrastructure, with a typical online database search taking less than three seconds. This ease of use combined with Global Relay's duplicate encryption algorithm keys offers Global Relay clients the highest level of data archiving security and functionality available today. In addition to its core product offering, Global Relay also provides all of its customers with access to a dedicated audit and electronic discovery team, in-house legal counsel and 24/7/365 tech support.

Global Relay's primary business model is based on a monthly recurring revenue stream. Each client is billed on a per user license fee based on the message type (email, instant messaging, text, social media etc) stored in their archive. The company's current

customer retention rate is 99.95%, which is significant factor that has led to strong year over year revenue growth.

A hosted message archive model also benefits from product stickiness because once customers become accustomed to a system they like, they will be less inclined to pay for the cost of a migration to transfer all their message data into a new system in addition to going through a steep learning curve. However, this is also the same reason some customers are reluctant to switch from an in-house archiving system to a hosted system. If the Chief Technology Officer (CTO) picks the wrong product and ends up migrating to another vendor because of a poor initial product selection, he or she could risk losing their job along with incurring unwanted migration expenses for the company. Therefore, the key decision makers will usually conduct a very thorough evaluation of each vendor and expect a strong return on investment to justify the need for migrating to a hosted model.

In addition to meeting each customer's business/compliance requirements, the core value propositions of a hosted message archive system are reduced upfront overhead, continual service maintenance/upgrades, and the ability to access the system via a secure web browser anywhere in the world. Customers who wish to leverage their current in-house Microsoft Exchange environment for email may also do so by connecting to Global Relay for hosted archiving, thereby reducing stress on their internal servers via reduced mailbox sizes. Once a customer has their email system setup with an electronic archive vendor they can then delete messages with the peace of mind of knowing that all of their historical message data is backed up in the cloud and can be easily searched and recovered at the click of a mouse.

## **1.5 Project Scope**

Through the innovation of cutting edge technology that helps regulated firms adhere to stringent federal legislation, Global Relay has become a trusted vendor of compliance message archiving services for the financial industry. This report will explore the possibility of increasing revenue growth through the release of a new collaborative Instant Messaging (IM) platform, specifically designed to meet the messaging needs of the financial community.

Currently, no integrated IM solution exists for financial firms that require compliance archiving. Although there are products available that provide IM archiving capabilities, they are not built on the foundation of compliance and therefore have many shortcomings. In order to determine whether there is a need for a new collaborative IM platform in the financial industry, an external analysis of the IM environment will be conducted for financial firms, followed by a review of current collaboration software trends. This information will then be used to determine the likelihood of a successful new product launch. Key success metrics at each stage of the online community life cycle will also be examined to help guide future product enhancements. Next, a proposed business model will be presented, while taking into account the current company strategies, strengths and resources. The final chapter will include a stakeholder analysis of the supply chain along with recommendations for distribution.

## **2: External Analysis of Instant Messaging for the Financial Industry**

While Global Relay's core competency is its ability to securely aggregate and monitor all electronic communication types, the company's management team recognizes that a fully compliant, reliable IM platform does not currently exist in the financial community. At best, this form of business communication (unlike email) must be continually patched and repaired in order to meet regulatory requirements. The first half of this chapter will summarize the primary issues financial firms face today regarding compliance IM archiving, followed by an overview of IM compliance regulation requirements and an analysis of current IM trends in the financial industry. The latter half of the chapter will then dissect each of the distinct technical components currently required in a multivendor compliance IM archive system and explain why this infrastructure is unsustainable in the long run.

Finally, the analysis conducted in this chapter will then be used to create a vision for a new disruptive technology to collaborate the financial community's growing IM compliance requirements in the subsequent chapter. By conducting a thorough external analysis of the standard IM infrastructure for the financial industry, this chapter will also create the foundation for a new business model, which will help expedite significant revenue growth potential for Global Relay.

### **2.1 Instant Messaging**

IM communication is a fundamental tool for conducting business these days, especially in the financial industry where massive sums of monies, funds and assets are

traded electronically within milliseconds. In order to be effective at their job, let alone gain a competitive advantage, traders and financial fund managers need to be able to communicate and collaborate quickly and effectively with individuals inside and outside of their company. IM clients allow financial traders to do just that; however, implementing a complete end to end technological solution that allows financial workers to execute business transactions in a compliant manner is an extremely expensive ongoing IT nightmare.

### **2.1.1 Issues with Current Infrastructure for Compliance**

There are currently dozens of disparate IM client services available to consumers and/or business organizations today. Financial firms looking to archive IM communications for compliance purposes need to be aware that each IM platform is dependent on other integrated vendors in order to adhere to the books and records retention requirements of the SEC and FINRA. The three critical technologies currently required to communicate and adhere to IM compliance regulation are *IM clients*, *IM gateways*, and *message archiving* products. Upgrading one product or vendor in this multivendor platform often reluctantly changes the protocol for another component within the system, which ultimately results in the inability to capture and log messages securely for compliance. This obviously presents great risk to many financial institutions that face stringent regulatory requirements.

Not only are there numerous IM clients for financial firms to choose from (which will be identified later in this chapter), each IM platform requires ongoing maintenance and upgrades that are often outside of the IT department's control. The constant upgrading of obsolete technologies in the standard IM platform outlined above for

financial firms presents a promising business opportunity. Global Relay has the resources, expertise and capabilities to build a reliable, collaborative and compliant IM solution to service the requirements of the financial community.

### **2.1.2 Regulation**

With new avenues of electronic communication come new laws and headaches regarding compliance in the financial sector. FINRA is the non-government regulatory body responsible for enforcing rules and regulations across more than 5000 brokerage firms and 675,000 registered representatives. Both the SEC and FINRA have strict mandates when it comes to message retention requirements for their member firms and have consequently enforced mandatory IM retention policies since 2003. More specifically, FINRA requires its member firms to retain and supervise all dealers' correspondence with the public. If a financial firm cannot reproduce a desired email or IM as part of a mandatory audit request it can risk substantial penalties in the form of fines, imprisonment, and loss of corporate reputation. For example, during 2007 and 2008, an employee of Societe Generale, Jerome Kerviel, used instant messaging to manage fraudulent trades made on behalf of his employer, resulting in the loss of roughly € 4.9 billion for the French bank. This was the second largest banking fraud ever discovered (Osterman Research, 2011).

With such severe penalties and consequences financial firms face for breaching compliance protocol, there is no room for error when it comes to implementing an IT infrastructure. However, as mentioned earlier, most IM clients (consumer and enterprise) were not designed for compliance purposes. This presents many problems for financial institutions looking to build internal governance policies within their existing IT systems.

## 2.2 Instant Messaging Trends and Statistics in the Financial Industry

### 2.2.1 Reproducing Communications

According to an annual survey conducted by Actiance, of 1,650 end users and IT managers, 39% of financial services organizations surveyed could not produce documentary evidence of IM within a reasonable time frame if at all (Actiance, 2010). This statistic is very concerning especially considering that these types of records are exactly the type of evidence that would be requested by corporate attorneys in the event of a lawsuit, or by federal regulators in the event of an SEC or FINRA audit.

Based on this survey, one can conclude that with the growing trend of new IM applications saturating the market, the need for a collaborative, compliant IM platform will only become more apparent in the financial industry. The chart below provides insight into the views of time required to reproduce IM communications in two of the most highly regulated industries; Financial Services and Energy and Utilities. Notice the percentage of organizations that cannot produce the required documents in a reasonable time or even at all for that matter. These firms are putting themselves at great risk by not implementing compliant IM protocols into their IT systems.

**Figure 2.1 Views on Time Taken to Reproduce IM Communications by Industry**

	Financial Services	Energy and Utilities	Overall
A few hours	30%	37%	21%
About a day	13%	7%	14%
Several days	10%	15%	11%
More than one week	8%	8%	5%
<b>We could not produce the documents in a reasonable time frame</b>	<b>18%</b>	<b>8%</b>	<b>23%</b>
<b>It would be impossible for us to produce the documents</b>	<b>21%</b>	<b>25%</b>	<b>26%</b>

*Source: Adapted from the work by Actiance Fifth Annual Survey (2010)*

## 2.2.2 Security Risks

Another key benefit of providing financial workers with a collaborative IM platform is the reduction of security risk that public IM clients typically face with regard to malware and intellectual property loss. Ninety-two percent of the Actiance annual survey participants see enforcing the use of a standardized unified communications platform by blocking rogue use of public IM as important (Actiance, 2010). Due to the lack of third party products required in a collaborative IM environment, this type of infrastructure is typically viewed as being less risky. Eighty-nine percent of the IT managers in this survey also identified public IM tools as carrying some or a great deal of risk.

The chart below provides insight into how severely IT professional perceive IM risk compared to end users between 2008 and 2009. Notice the major change in perception between IT and End User in 09 regarding advantages of IM outweighing the risks. Although both groups agree IM is a security risk, end users in particular have a predisposition that the advantages of IM significantly outweigh the security risks. This type of misleading perception can lead to devastating consequences with financial regulators.

**Figure 2.2 Perception of IM Security Risk - IT vs. End User**

	<b>IT 08</b>	<b>IT 09</b>	<b>End User 08</b>	<b>End User 09</b>
<b>IM is risky for my company's network security</b>	53%	69%	44%	54%
<b>The advantages of IM outweigh the risks</b>	33%	60%	37%	85%

*Source: Adapted from the work by Actiance Fifth Annual Survey (2010)*

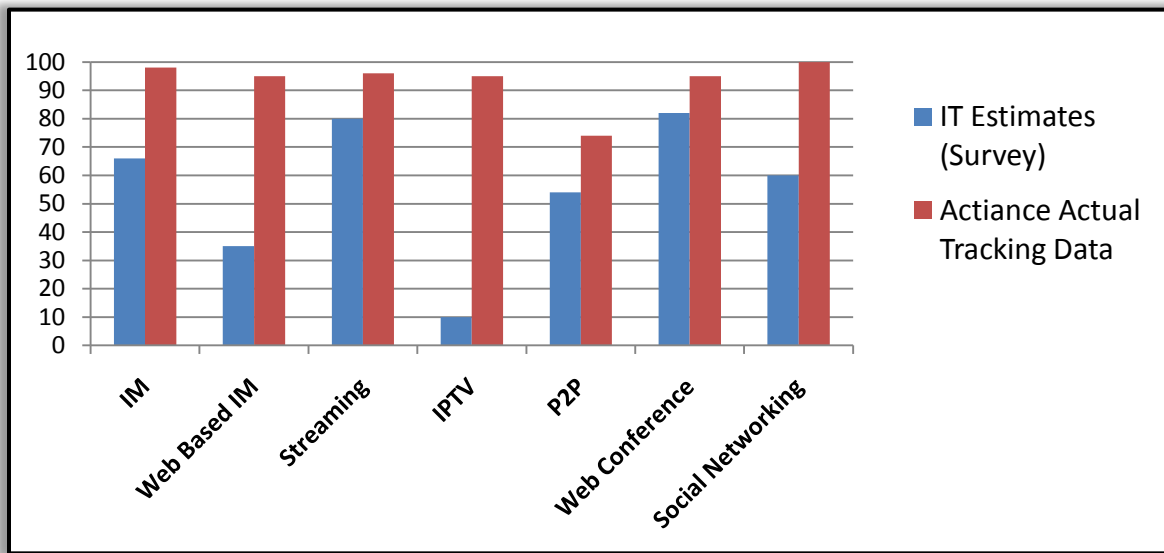


### **2.2.3 End User Trends**

While email is critical component to business communication today, users will always look to communicate in the easiest, most efficient method possible. As a result, IM has risen in popularity. Consequently, numerous applications such as Facebook and Skype have also begun to implement IM technology into their platforms; however, these types of applications are typically accessed outside a company's firewall. This presents another problem because if a financial firm does not have visibility into business communications conducted on these channels, then it does not have the ability to properly monitor or supervise for compliance. Other applications that can commonly circumvent a company's network are web based IM programs such as Meebo, which integrates multiple IM services including Yahoo Messenger, AIM, Google Talk and Facebook Chat.

Below is a chart outlining IT estimate vs. actual End User usage tracking between various enterprise communication mediums. Notice the disparity between IT and End User perception with regard to IM and web based IM communication. These numbers expose potentially dangerous channels of communication that are currently circumventing company network systems, thus placing regulated firm at risk for breach of compliance and surveillance.

**Figure 2.3 IM End User Attitudes and IT Impact**



*Source: Adapted from the work by Actiance Fifth Annual Survey (2010)*

Although the same principles apply for securing IM communications as they do for email in the financial sector, the environment in which IM users communicate is significantly more complex, especially with regard to multi-party chat rooms. For example, a single chat conversation can include various individuals popping in and out of the conversation at different times. From a compliance perspective, there needs to be a clear understanding of the context of each participants understanding of these conversations. Therefore, financial firms are required to maintain an audit trail of all IM chats to track which users entered and left these conversations and at what point of time they did so. One additional layer of control (which will be discussed later in this chapter) that can be implemented in IM compliance to restrict communication between individuals of conflicting interests (even within a group chat) is a feature commonly referred to as “ethical walls”.

## **2.3 Current Instant Messaging Infrastructure for Financial Firms**

### **2.3.1 Instant Messaging Clients**

Within the financial industry, many electronic messaging tools are currently utilized among securities traders, banks, investment advisors, hedge funds and other financial services representatives. Communities are built around trading asset classes such as bonds, fixed income, mutual funds and equity or stocks. Instant Messaging in particular provides firms that manage these asset classes with a competitive advantage by allowing their employees to communicate with customers quickly and effectively. For example, the sell-side firms (private equity/hedge funds/mutual funds) looking to broadcast sales or distribution information to the buy-side firms (broker-dealers/investment banks) can do so over an IM client such as Yahoo Messenger or AIM Instant Messenger. IM chat directories also allow the buy-side to collect real-time information from financial analysts, which is crucial to survival in today's fast-paced financial markets. Below is a breakdown of the most commonly adopted IM clients by various asset classes to date.

- Energy sector ---> Yahoo Messenger/Yellow Jacket
  - Broker-Dealers/Banks
- US based Equity ---> AIM/Microsoft OCS/LYNC
  - Broker-Dealers, Hedge Funds, Mutual Funds, Private Equity, Banks
- Fixed Income ---> Bloomberg Chat
  - Banks
- Foreign Exchange ---> Reuters Messenger

Due to its strong purchasing power, the buy-side usually drives the agreed upon messaging platform and the sell-side often follows. Research firm TowerGroup stated in a recent survey that 60% of broker-dealers, hedge funds, custodians, and fund managers said they use IM for everyday business. Employees involved in trading and trade processing were found to send the largest number of messages and to most frequently use IM to interact with external counterparts (Kite, 2007). Based on this information, one can clearly identify that IM is already heavily entrenched in the financial community and the dependency of IM communication is only growing. Furthermore, the IM clients listed above are only a few of the options available to financial institutions today. Other available IM clients include Google Talk, ICQ, Skype, Trillian, Jabber, and Pivot.

However, as mentioned earlier, the universal problem that exists among the options listed above for financial firms is that none of the IM client server products available have been designed from a compliance perspective. In addition, there is currently no standardized IM platform that has been adopted across the entire financial industry to incorporate financial workers from all asset classes. Therefore, financial representatives are to chat on numerous IM clients that cannot universally communicate with one another. This multilayered environment presents undesirable security risks as buyers and sellers will be inclined to forced circumvent their established IT infrastructure if they cannot communicate or chat with desired contacts on their existing IM “buddy list” due to network or product restrictions.

### **2.3.2 Instant Messaging Gateway**

Once a financial institution has decided on an IM client to deploy across its network, it now has to implement a proxy server or IM gateway such as IMlogic IM

Manager, to direct end user chats to. The primary purpose of this distinct, but unique piece of technology is to manage IM users and to export their communications into an archive for compliance review. All message archive products currently require a third party vendor from which to ingest data and the IM gateway fulfills this requirement by sitting in between the IM client and the archive.

The IM gateway can be deployed on an internal server or in the cloud with another vendor. Some firms may also choose to deploy enterprise IM clients such as Microsoft Live Communications Server as opposed to public IM clients such as Yahoo Messenger that include basic archiving capabilities. Other firms may choose to utilize the archiving capabilities within an IM gateway. However, all of these options provide very limited capabilities when it comes to compliance archiving and are therefore, unacceptable standalone solutions for financial firms. The only viable option for regulated firms is to redirect their IM chats to an IM gateway (proxy server) that can be configured to a compliance archive solution for data ingestion. This is only the second mandatory component in a multivendor IM platform.

A critical capability of the IM gateway for financial firms is to provide network supervision by controlling whom their end users can chat with, both internal and external to the firm. This feature is typically referred to as building “ethical walls” within the industry and is meant to prevent the communication and collaboration of parties that may have conflicting interests either inside or outside of the company. An example of this might be creating barriers between independent outside auditors hired at the company’s expense and internal traders that are selling securities in exchange for a commissioned payout. In order to prevent unethical activities from occurring in this scenario, an IT

Manager may choose to block IM communication between these two parties or lock certain users to internal chat only. As there are many scenarios similar to the one outlined above, a collaborative messaging platform would have to address ethical walls as a critical component to its offering for the financial sector.

The primary reason most financial firms are forced to implement an IM gateway is that this technology allows them to log all IM activities; regardless of what type of IM client their end users are utilizing (AIM, MSN, AIM etc.) The IM gateway will then transfer all log files or IM chats to a database such as Microsoft SQL Server or Oracle. However, simply transferring these messages into a database is not enough to adhere to stringent regulation requirements. These messages need to be time and date stamped, indexed, serialized, easily searchable and/or recoverable, retained for a specific period of time and replicated across multiple storage units (just to name a few). Furthermore, these regulation requirements pertain to all electronic communication, not just IM. Figure 2.4.2 below illustrates the most commonly used workflow for configuring an IM gateway with a hosted message archive.

**Figure 2.4 Instant Messaging Gateway Configuration for Message Export**



*Source: Author*

Another common problem most regulated financial firms come across is managing multiple systems to include all their various message types (i.e. email, Blackberry, social media, IM, e-fax, text, etc). According to an analyst from Forrester Research, exporting IMs from an IM gateway into a message archiving system is the recommended approach for firms that are trying to achieve for regulatory compliance. It allows firms to archive emails, IM (regardless of the IM client), and attachments in a single repository and to standardize storage management practices (Rugullies, 2009). Finding a protocol to achieve this requirement for compliance purposes poses one of the greatest challenges for IT professional in the financial industry.

There are also ongoing maintenance and upgrade costs for managing a multivendor platform like the one most commonly implemented by financial firms, not to mention breakdowns in the overall solution when one technology becomes obsolete and gets replaced by a newer piece of technology (such as when a trader upgrades to an updated version of AIM). Since most of these disparate technologies were not originally designed for the financial sector, (let alone to communicate with one another) even the smallest break in the chain illustrated above can result in significant legal ramifications if messages are not captured in the appropriate format, or even worse, are unrecoverable. The final and most important piece of technology in this multivendor IM platform is the message archive, which will be discussed in greater detail below.

### **2.3.3 Message Archive**

The final component to a multivendor compliance IM platform is the actual portal or message archive that messages get routed to. Once this data has been ingested into an archive, reviewers can implement supervisory controls across their messaging data and

search or recover IMs and emails based on very specific criteria from one central repository. Investigators responsible for legal or regulatory discovery require these kinds of tools in order to adhere to regulatory requirements. Therefore, the level of integration that archiving vendors can provide with IM gateways is very important.

Although there are many generic message archive systems available today, very few specialize in compliance archiving for the financial industry. The primary market leaders in hosted archiving for the financial industry are Global Relay, Smarsh, and Live Office, all with relatively equal market share. Unlike IM clients or IM gateways, compliance message archiving portals are not a commoditized product and often entail lengthy due diligence across numerous key decision makers within a financial firm.

Due to high data migration costs, new training, and product stickiness of hosted message archives, making the correct decision the first time around is imperative for many IT managers. Factors such as security, encryption, uptime, data center architecture, product/industry expertise, support, cost, ease of use and compatibility are just a few of the many requirements that typically need to be evaluated from a customer perspective. Combining this decision making process with an integrated IM client and IM gateway makes the overall solution very complicated, fragmented and high maintenance. For the reasons outlined above, managing IM archiving in isolation is not feasible for virtually all financial firms.

Considering that a constantly changing multivendor IM platform like the one outlined in this chapter is the best possible option currently available to financial firms exposes a great market opportunity. The following chapters will examine how Global Relay can capitalize on this need through a collaborative IM offering that integrates these



three disparate technologies into one product, while providing value added functionality tailored to the financial sector. By understanding the current IM trends and technological infrastructure required to archive IM communications in a compliant manner, we can now begin to create a vision for a new disruptive IM platform for the financial community to replace the inadequate industry standard.

### **3: Collaboration for the Financial Community**

In the world of investment banking, there is a strong need to connect the “buy-side” with the “sell-side” in order to execute financial transactions, which is usually facilitated via IM communication. Now that we have completed a thorough analysis of the IM environment for financial firms, we can begin to formulate a vision for the future to address this particular market’s needs. Collaboration software, such as Google Docs, is a program that integrates multiple applications or services into one platform and is gaining in popularity among many IT implementers. Compliance, collaboration software for IM is an ideal solution for Global Relay to develop because it would eliminate the need for financial firms to maintain a multivendor IM system by fusing the IM client, IM gateway and message archive into one unified platform. Currently no product exists in the market than can integrate these three technologies into a fault-tolerant compliance archive solution. Therefore, we will analyze some of the current trends and factors that can help increase adoption rates for collaboration software in small to medium business and enterprise organizations. Next, we will identify some key benefits and success metrics of collaborative software platforms followed by a thorough analysis of the five primary stages of online community lifecycles as outlined by Iriberry and Leroy (2009) including Inception, Creation, Growth, Maturity, and Death.

#### **3.1 Adoption of Collaboration Software**

Collaboration software has been steadily increasing in popularity with IT departments primarily due to the way businesses are interacting with their customers and

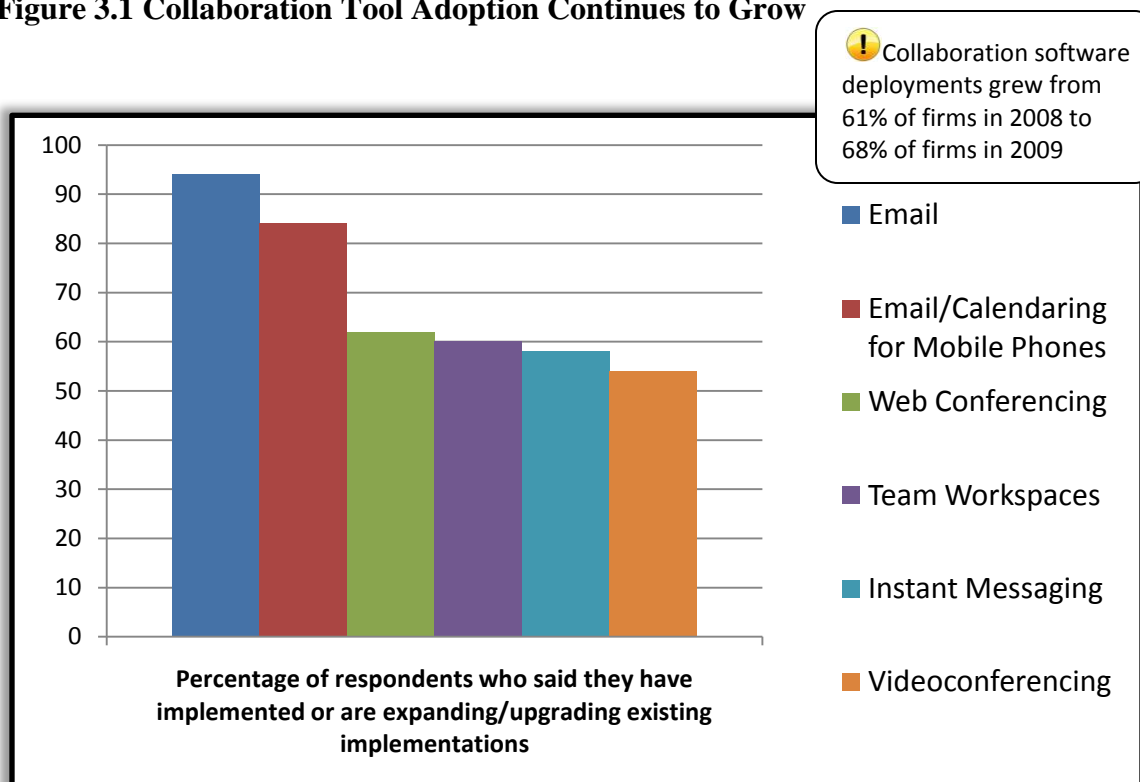
partners. Now more than ever we are seeing greater dependencies on collaboration and transfer of information. Email revolutionized how the business community interacts and is consequently the primary mode of communication today. Business users can instantly send information to anyone around the world with the click of a mouse. As a result, IT departments have been forced to find new ways to manage and store the large volumes of data that gets transmitted over their systems daily. However, some vendors discovered that email alone is not sufficient to address certain collaborative initiatives, which prompted the invention of document file-sharing systems such as Microsoft Sharepoint. Today, the new evolution of collaboration is the adoption of integrated communication systems. A prime example of integrated communication is the integration of Skype and Facebook. In 2010, Skype launched a beta product that allowed users to integrate their Facebook news feeds, and contact profiles directly into Skype. This technological integration allowed Skype users to leverage their Facebook directory for instant chat, quick calls or video conferencing through their existing Skype system. Users can also post Facebook status updates directly from Skype.

Understanding what key factors drive the need for collaborative software adoption will provide us with greater insight into what benefits and features Global Relay's customers will require. Due to the multiple layers of hardware, software and program applications required to integrate compliant, collaborative communications in the financial industry, no vendor has been able to integrate a standalone solution. The integration of each feature and benefit should then be implemented based of the stage of the online community life cycle, which will be analyzed later in this chapter. Finally, by

fusing this information with the company's core competencies and strengths, a proposed model will be presented in Chapter 4.

Perhaps the greatest benefit most companies see in collaboration software is cost reduction. The rationale behind this is very simple; instead of purchasing, implementing and maintaining separate systems to accomplish a goal, companies can purchase a turnkey solution that provides a holistic solution to a problem, which is much more desirable. Even during the freeze of IT spending in 2008 and 2009, Forrester Research still predicted an 8.1% growth rate for global IT spending in 2010, which included collaboration software and Instant Messaging as outlined in the graph below (Keitt, 2010).

**Figure 3.1 Collaboration Tool Adoption Continues to Grow**



Source: Adapted from the work by Keitt (2010)

According to Forrester, the three primary drivers behind software collaboration adoption are:

- **Mobile Workforce** – Many information workers find themselves working remotely, as 41% of US, Canadian, and UK information workers report telecommuting at least part time (Keitt, 2010). Many of these workers are usually working outside of their company headquarters and require numerous devices such as laptops, smartphones and tablets in order to conduct business. The financial industry is very fragmented and Investment Advisors or Broker-Dealers often need constant access to collaborative tools in order to stay in touch with their customers. One common issue in the financial industry today is the inability to send IM chats via smartphones in a compliant manner, which can be a huge detriment when traveling.
- **Evolving marketplace** – With emerging cloud computing technology, companies increasingly outsource their IT solutions partially or wholly to cloud-based solution providers. Hosted solutions such as Global Relay have allowed firms to adopt best-of-breed technologies that are constantly evolving to meet the requirements of their customers. This evolution has forced vendors to begin integrating their systems in order to maintain a competitive advantage. For example, Trillian is an IM platform that federates numerous IM clients such as Google Talk, MSN, Yahoo, AIM, and Skype into one application. Some financial institutions choose to deploy this system in order to provide their workers with greater chat versatility because it allows buyers to chat with sellers who may not be operating the same IM client. However,

Trillian is not a standalone compliant IM solution for the financial industry and still requires an additional message archive and IM gateway management product.

- **Efficiency** – As firms begin to recover from the financial meltdown of 2008, a greater focus has been placed on reducing operational costs. One way this can be accomplished is through the consolidation of IT systems and services. Web conferencing, IM, email, mobile phones and data sharing portals have made collaboration more feasible in today's dynamic work force. Particularly in the financial sector, workers need a resilient one stop shop where they can conduct research, communicate with customers and execute trades in a compliant manner with extreme efficiency and reliable uptime. If a business-critical IT network goes down for even one hour, this can literally cost a company like Goldman Sachs tens of millions of dollars if it prevents their Broker-Dealers from executing potential trades with investors via email or IM. Most Broker-Dealers are typically engaged in numerous IM chats with potential buyers at any given time so these types of risks are not tolerated in the cutthroat world of securities trading.

Based on the evidence provided above, it is safe to assume that we will continue to see greater adoption of collaborative software services, particularly in the financial industry where firms are forced to use numerous IT systems simultaneously, in order to comply with regulatory requirements. The fact that firms were willing to increase their spending on collaboration software during a recession is a very positive sign that this

trend will only continue to grow stronger, thus making it an ideal time for Global Relay to release a major collaborative IM platform for the financial community. In fact, 51% of firms deploying six tools have implemented unified collaboration along with 29% of those that have deployed five tools (Keitt, 2010). Due to the technical complexity of implementing a compliant IM system, financial firms currently deploy far more than six tools in order to provide their traders with a compliant platform to conduct business. These statistics demonstrate that firms will gravitate to simpler, standardized systems, especially if they can be easily outsourced to hosted vendors such as Global Relay, as opposed to developed, maintained and upgraded in-house.

Furthermore, IM usage is also on the rise. In a world where travel is being scaled back due to telecommunication advancements, businesses are naturally investing in technologies like Web conferencing and Instant Messaging. By 2013, total penetration of these two technologies should reach 77% and 71% of firms, respectively (Keitt, 2010). IM is actually more prevalent in the financial industry because unlike email, it provides users with a presence engine to identify whether or not a user is currently available. This is how traders often communicate their offerings to buyers in order to execute financial transactions. On any given day there are millions of people interacting this way on the stock market; however, this market has not yet standardized on a compliant collaborative messaging platform.

In order to move financial companies along the adoption path of collaborative software, Global Relay will need to define the vision of a holistic solution to its customers and clearly communicate the benefits of its platform. Most financial firms are fully aware of the complications currently induced by multivendor IM platforms;

therefore, integrating all the various products into one holistic system should not be a hard sell. However, creating a reliable technology that can securely integrate the required components of a collaborative IM compliant platform as outlined in Chapter 2, without removing functionality those users have become accustomed to will be challenging. As a result, this IM platform will need to be pushed top down from suppliers, key partners and prestigious customers as individual users will naturally be reluctant to switch IM clients that they have become accustomed to. Ideally, this solution will match the existing benefits users enjoy with their current IM clients and provide even greater functionality tailored to the financial industry.

Finally, achieving critical mass through various distribution models will be vital for adoption, as members will not want to participate in a unique online community that lacks access to a sufficient user base. Strategies and recommendations for achieving these objectives will be discussed further in Chapter 5.

## **3.2 Online Communities**

Over the last two decades, the internet has become a central portal where business users and individuals go to exchange valuable information. As a result, online communities are growing in popularity as individuals with common interests, needs, and goals seek out other individuals that either share their common interest or can help them accomplish specific goals. According to Hagel and Armstrong (1997), online communities can be defined as “computer-mediated spaces where there is a potential for an integration of content and communication with an emphasis on member-generated content. Some examples of platforms that help drive online communities include wikis,



blogs, electronic boards/meeting rooms, chat rooms, discussion boards, web logs and more recently new multimedia technology and applications known as Web 2.0.

Hagel and Armstrong (1997) studied online communities as viable business models capable of attracting customers who are searching for information on products or activities of interest to them, and who want to find and build relationships, conduct transactions, or live fantasies. They suggest that if organizations provide mechanisms to identify and satisfy customer needs more accurately this can then turn into profits for vendors. Based on this finding, if Global Relay can build a collaborative compliant IM community that financial users want to participate in, this platform will build stronger customer loyalty in addition to increasing profits. Ultimately, this platform must allow customers to increase productivity while complying to regulation in order to be successful.

As more and more individuals continue to rely on the internet as a means to building and establishing new relationships, understanding the different life cycle stages of an online community can prove very valuable for any company looking to release a collaborative end user platform. However, before we can analyze the online community life-cycle model further, we must first understand the benefits and success metrics this model can provide Global Relay.

### **3.2.1 Benefits**

Perhaps the greatest benefit of a collaborative IM platform for the financial community will be the ability for buyers to communicate and collaborate with sellers located in disparate geographical locations, directly from the comfort of their home, office or mobile device. To also be able to do it compliantly, more economically and

more assuredly adds to the allure. Currently, in order to stay compliant, members of the financial community can only communicate over their business network, which as mentioned before is also very prone to disruption. This is still a drastically radical approach to conventional stock trading considering that only a very few years ago traders were required to execute purchases from a physical trading floor and over the phone with an investor. Now, investors can find traders and vice versa with a simple click of the mouse or over an IM chat and execute a trade electronically.

Online communities that share common interests and goals can also provide certain intrinsic benefits to members even if hosted by profit driven organizations. Unfortunately, the financial industry often attracts negative media attention due to speculative assumption of greed, corruption and manipulative practice. Perhaps a centralized online community built on the foundation of compliance is exactly what is required to remove the stigma that regularly plagues this industry.

Online communities of customers are believed to promote customer loyalty when customers perceive value in the ability to communicate with other customers regarding products and services they purchase or wish to purchase (Hagel and Armstrong, 1997). Therefore, financial members will be less likely to circumvent their primary IM communication channel and engage in rogue online trading behavior if the majority of the community has standardized on an established communication platform that meets all the rules and regulations of the governing bodies. Developing strong intrinsic values will also benefit the financial community as a whole because members will build relationships based on trust and compliance in an attempt to achieve collective goals between the buy

and sell side. As more members begin to participate in this community, the additional benefits listed in Table 3.1 should also begin to form.

**Table 3.1 Benefits of Online Communities to Organizations**

<p><b>Customer Loyalty</b></p> <ul style="list-style-type: none"><li>- Opportunity to obtain feedback and information on customer needs and requirements</li><li>- Opportunity to improve customer service</li></ul> <p><b>Employee Communication and Trust</b></p> <ul style="list-style-type: none"><li>- Better understanding of what other are doing in the organization</li><li>- Increased levels of trust</li></ul> <p><b>Visibility and Reputation</b></p> <ul style="list-style-type: none"><li>- Opportunity to improve reputation</li><li>- Increased access to expert knowledge</li><li>- Information exchange with highly credible source</li></ul> <p><b>Productivity</b></p> <ul style="list-style-type: none"><li>- Increased quality of knowledge and advice</li><li>- Increased idea creation and enhanced problem solving</li><li>- Increased new business and product innovation</li><li>- Time saving during information seeking and sharing</li></ul>
---

*Source: Adapted from the work by Millen (2002)*

All the benefits listed above are key forces that Global Relay will need to clearly communicate to its client base in order to help facilitate adoption of a new IM platform in the financial community. As financial firms continue to rebuild trust with investors following the most recent stock market collapse, customer loyalty, employee communication, visibility and reputation will be key drivers to recovery for this industry. Equally important to the adoption of a collaborative IM platform is productivity. Increasing the quality of information through collaborative tools while saving time will be important requirement for users looking to standardize on a new solution.

### 3.2.2 Success Metrics

In order for benefits to be passed along to customers, an online community must form and grow in numbers. According to Iriberry and Leroy (2009), the most common metrics used in the empirical research they reviewed for online communities were volumes of member's contribution and quality of relationships among members. The common finding was that the larger the volume of messages posted and the closer members feel to each other, the more successful the online community becomes.

Preece (2001) also identified a number of success metrics and classified them into two groups: those related to sociability and those related to usability. Sociability measures include number of participants, number of messages per unit of time, members' satisfaction, reciprocity, and trustworthiness. Usability metrics include number of errors when using the interface, user productivity, and user satisfaction among others. She emphasized the importance of considering both categories in evaluating the success of online communities.

Quantitative and qualitative metrics can also be used to evaluate the success of online communities. Quantitative metrics include values such as size, number of members or number of visits/logins, contributions, and relationship development. Size for example, is a common measure of success for many social media platforms such as LinkedIn and Facebook. LinkedIn achieved a valuation of \$4.25 billion (11.3 time projected annual sales), which many analysts contribute to its substantially large membership base of business professionals (DeltaQuest, 2011).

Qualitative measures on the other hand are directly linked to member satisfaction and quality of members' relationships. The quality of members' relationships is

relatively low in current financial IM communities due to high turnover among fragmented platforms. Members cannot easily migrate their existing “buddy lists” as they relocate or change positions within the financial industry. Zhang and Hiltz (2003) also studied the impact of making members’ profiles and pictures available to the community on how satisfied members are with being part of the community. They found that geographically distant members enjoy and appreciate getting to know each other by viewing each other’s pictures and reading each other’s profiles.

Although understanding all the various success factors of online communities is complex, they are nonetheless important variables for Global Relay to monitor. These success factors will ultimately allow Global Relay to measure the impact of adding new features and benefits to its IM platform.

### **3.2.3 Online Community Life-Cycle Model and Key Success Factors**

As we begin to analyze the unique stages of the online community, it is important to recognize that there are different types of communities that can be classified according to the needs they fulfil. According to Lazar and Preece (1998), online communities can be classified based on four dimensions as outlined by figure 3.2 including: attributes, supporting software, relation to physical communities, and boundedness. It is also important to note that some online communities may fall into multiple categories if they share characteristics in each of these four dimensions. Financial communities are most easily grouped by *attributes* due to shared goals, interests, and business transactions, and to a lesser extent, by *supporting software* and *relation to physical communities*.

**Table 3.2 Different Online Communities Based on Four Dimensions**

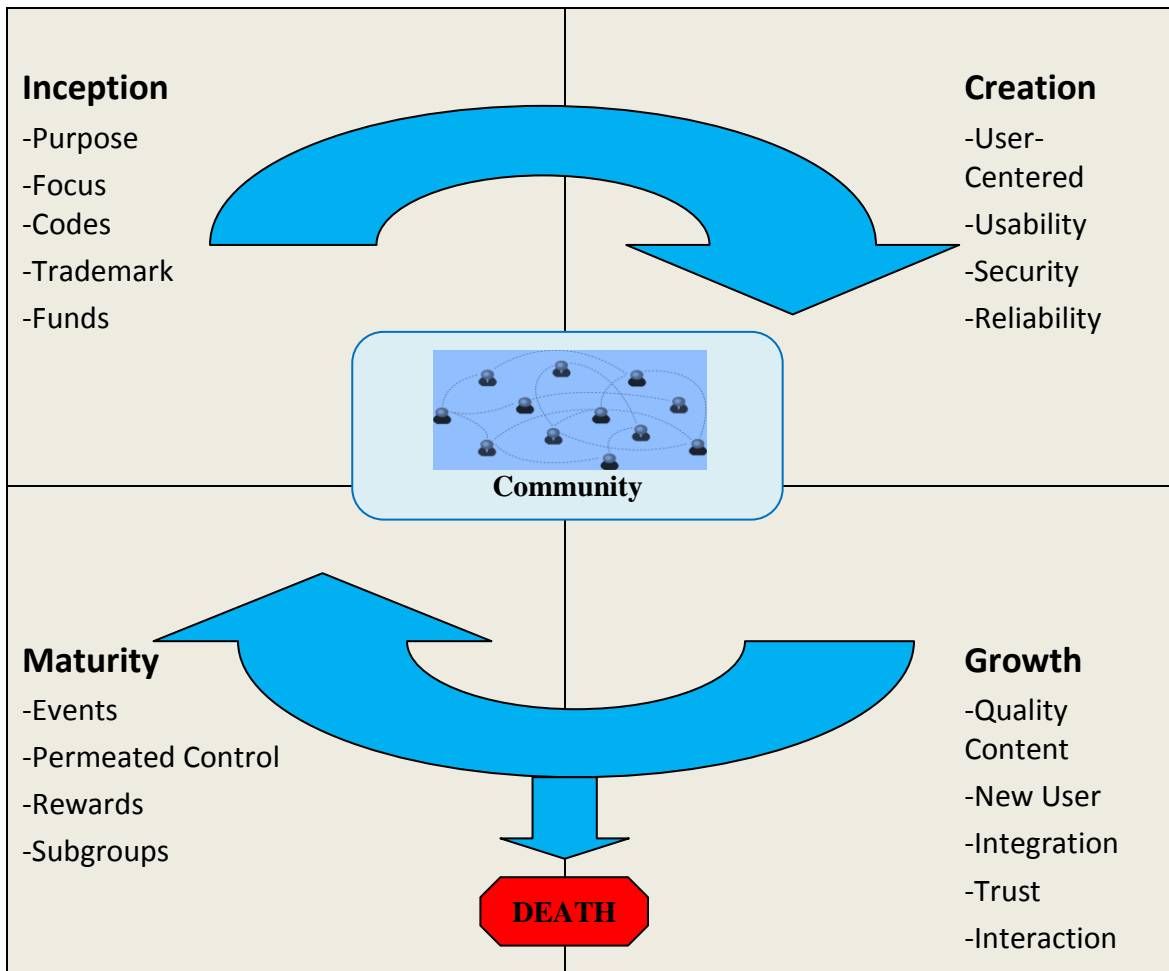
<p><b>By Attributes</b></p> <ul style="list-style-type: none"> <li>- Goals, interests</li> <li>- Work</li> <li>- Play</li> <li>- Politics</li> <li>- Business transactions</li> <li>- Education</li> <li>- Shared activities</li> <li>- Shared resources</li> <li>- Support</li> <li>- Size</li> <li>- Anonymity levels</li> <li>- Sources of revenue</li> </ul>	<p><b>By Relation to Physical Communities</b></p> <ul style="list-style-type: none"> <li>- Based on (frequent face-to-face)</li> <li>- City</li> <li>- Government</li> <li>- Education</li> <li>- Some what (periodic face-to-face)</li> <li>- Online scholarly community</li> <li>- Hobbies</li> <li>- Not related (no face-to-face)</li> <li>- Anonymity – role playing</li> <li>- Health</li> <li>- Financial</li> </ul>
<p><b>By Supporting Software</b></p> <ul style="list-style-type: none"> <li>- Microsoft Exchange</li> <li>- Newsgroup</li> <li>- IM Clients</li> <li>- Web-based bulletin</li> <li>- Team rooms</li> <li>- Blogs</li> </ul>	<p><b>By Boundedness</b></p> <ul style="list-style-type: none"> <li>- Tightly</li> <li>- Organization intranet</li> <li>- Loose</li> </ul>

*Source: Adapted from the work by Lazar and Preece (1998)*

According to Iriberry and Leroy (2009), the five stages of the online community life cycle are inception, creation, growth, maturity, and death. In order for an online community to achieve its maximum potential, it must evolve in the specific order listed above without ignoring any stages. Although understating this framework will help Global Relay evolve its collaborative IM platform, achieving critical mass is still an iterative process. Furthermore, each stage also contains certain success factors that will increase the likelihood of adoption through the entirety of this community’s lifecycle.

Therefore, it is very important to identify what users and management will require throughout the life cycle in order to increase participation. For simplicity, each stage in figure 3.3 will now be analyzed in greater detail.

**Figure 3.2 Online Community Success As Seen From a Life-Cycle Perspective**



*Source: Adapted from the work by Iriberry and Leroy (2009)*

**i. Inception**

This is the first stage of the of the community lifecycle that transpires as a result of members’ needs for information, support or relationships. For Global Relay, this need is primarily driven by the financial community’s buy-side looking to efficiently

communicate with the sell-side to execute business transactions. Inception communities usually begin with a focus (stock trading/investing), and contain some rules of behavior and communication (compliance) which helps the communities maintain focus.

In business organizations, communities are typically born when a vendor, releases a new platform for interaction. Key success factors at this stage include: purpose, focus, code of conduct, and trademark.

- **Purpose** – Before releasing a new IM platform for the financial community, Global Relay should communicate a clear purpose for the product that is explicitly written on the interface or homepage. As there are currently numerous IM client applications for customers to choose from, they need to know what the purpose of this new community is and why they should participate.
- **Focus** – Global Relay must decide on the key needs its new collaborative IM platform will address and clearly identify characteristics of the target audience that will use this product. The primary need in this case will be to provide a secure, scalable, compliant and fault-tolerant instant messaging system built specifically to address the regulatory requirements of the financial sector. As opposed to a multitier vendor application system, this will be a standalone turnkey solution.
- **Codes of Conduct** – As this IM platform will be specifically tailored to the financial community; very strict codes of conduct with respect to compliance will be enforced. All end user communications will be properly monitored, archived and searchable in accordance to the rules and regulations of the SEC



and FINRA. Furthermore, users must not be able to circumvent the system by communicating outside of the company's firewall.

- **Trademark** – This will be used to differentiate the community from other standard IM chat systems on the market. As Global Relay is currently known for its compliance archiving capabilities in the hosted archiving industry – *Global Relay Message* will be used to signify a distinct IM collaboration tool tailored to compliance regulation.

## ii. Creation

During the creation stage, Global Relay will need to select the technological components that will support this community based on the needs of its members and the purpose of the community. A different set of success factors take precedence over those that were executed at the inception stage. Global relay must now focus on the needs of its users, and ensure that the tools implemented in its new IM platform are usable, the platform is reliable, and that the personal information of each member is secure. Finally, the system as a whole must provide adequate performance that at least matches what users have experienced with other IM applications, otherwise these users will be reluctant to change services. Key success factors at this stage include: user-centered design, interface usability, security and privacy, identity persistence, reliability, and performance.

- **User-Centered Design** – Understanding member preferences will maximize benefits to the community. Users can initiate 1-on-1 IM conversations, multi-user chat or join persistent chat rooms. This platform will also support ethical

walls to restrict communication between users of conflicting interest, off-line messaging, logging, archiving, monitoring, auditing, and reporting.

- **Interface Usability** – The interface must be sophisticated, yet simple and easy to use. Some customized features of Global Relay’s collaborative IM platform will include parity between thin-client desktop and mobile, so that users can access the service and seamlessly transition from the desktop platform to their BlackBerry, Apple iPhone, or Google Android between work, home, and travel.
- **Security and Privacy** – The management of members’ data is a very sensitive issue, especially in the financial community. Therefore, protocols around member access-rights, privacy, security, and authorization must be handled with great care. The IM platform architecture will include end-to-end message reconciliation; message read receipts, guaranteed message delivery, fast indexed search, and write verification of data with geographically dispersed storage for data redundancy.
- **Identity Persistence** – The ability to identify other members within this community will be a key driver to building strong network effects. In order to address this concern, the Global Relay IM platform will have the ability to federate some of the most commonly used message types in the financial industry including Microsoft Office Communications Server/Microsoft Lync Server and Reuters Messenger in addition to providing profiles for each user.
- **Reliability** – As financial traders and investors become reliant on Global Relay’s IM platform for facilitating daily business transactions, it is

imperative that the system maintains a high level of stability and reliability.

Global Relay's Message Archiver currently maintains an uptime of 99.99%.

The same level of certainty and resiliency will also be applied to the IM platform.

- **Performance** – As all IM communications from this platform will be ingested into the Message Archive, search and retrieval performance of archived instant messages should remain status quo.

### iii. **Growth**

As Global Relay Messaging enters the growth stage of its community life-cycle, word about this community begins to spread and more members continue to join, thus strengthening network effects. Subsequently, a culture begins to form with a unique identity and common vocabulary across various roles. At this stage Global Relay must ensure that as new members visit the platform they join in and that their transition is as smooth and seamless as possible. These new members must also be provided with up-to-date quality and content for the platform. In order to build trust and long lasting relationships within this community, it will also be imperative to clearly identify each member and make his or her profile easily accessible in addition to promoting any reputable organizations or sponsors that support the platform. Key success factors at this stage include: attracting members, interaction support, trust building, reaching critical mass, and transparency.

- **Attracting Members** – In order to convince new financial members to abandon their current IM client and migrate to Global Relay's collaborative IM platform, certain bonus programs or incentives should be offered to new

members. As Global Relay's primary revenue model is based on the number of users stored in the Message Archive product, offering a new IM platform free of charge in order to drive additional users into the archive will be the most viable revenue model. A proposed business model will be presented in greater detail in Chapter Four.

- **Integration Support** – Each new member will be provided with a dedicated provisioning representative within Global Relay to assist with the integration and configuration of any new message type for their account.
- **Trust Building** – Building trust among the members of this community will undoubtedly take time. Not only will customers need to trust that the platform meets their technical requirement, they will also need to trust other members within the community to make the platform a success. Building upon a large market-share in the hosted message archive industry (particularly among existing Hedge Fund customers and Broker-Dealers) while leveraging key Financial Data platforms will prove vital to accomplishing this task.
- **Reaching Critical Mass** – This is probably the most important success criteria in the online community life-cycle. If Global Relay cannot reach a high number of members within a short period of time, another vendor may steal this new potential market opportunity or members may simply revert back to their existing IM clients. Recommendations for achieving this goal will be examined further in subsequent chapters.
- **Transparency** – As the intended use of this new IM platform will be driven by compliance requirements, transparency into all communication details

including: login time, duration of conversation, participants, date and time of conversation, as well as content must be all fully documented, searchable and recoverable in accordance with the SEC and FINRA regulations. Increasing transparency with regard to internal communications among firms within the financial industry will also be important in achieving critical mass.

#### **iv. Maturity**

If successful implementation of all previous stages occurs, then online communities eventually form into mature organizations. The primary focus at this stage is to maintain sustainability for as long as possible while striving for continued success. Critical mass has most likely occurred by now as members have standardized on an agreed upon compliant messaging platform for the financial sector. Members have most likely also formed subgroups within the community based on their asset trading class in order to facilitate targeted discussions and interactions. The success factor that deserves the greatest attention at this stage is recognition of members' contributions. Members who have demonstrated the highest level of loyalty at this point should be recognized and rewarded. Key success factors at this stage include sales and offers, user tools, recognition of contributions, recognition of loyalty, and member satisfaction management.

- **User Tools** – As the Global Relay Message platform will be embedded into the Message Archive product, the user tools for accessing archived IM communications will remain unchanged. Additionally, the system will also be able to integrate user profiles and communications from two other commonly used messaging systems in the financial industry - Microsoft OCS/LYNC and

Thomson Reuters Messaging. There should be a seamless interaction between the Global Relay Message platform and the existing Message Archive product.

- **Recognition of Contributions** – In order to sustain the maturity stage for as long as possible, appreciation of contributing members will be key. This will most likely come in the form of recognition by name, status, or participation. Fortunately, the true value of online communities is not necessarily the product itself, but the number of members using it. Convincing financial member firms to migrate to a new IM platform would be a very challenging and lengthy process for any competitor. Therefore, if played correctly, Global Relay could sustain healthy profits at this stage for a substantial period of time.
- **Recognition of Loyalty** – Special recognition of loyal customers could take shape in the form of special treatment via a reward model. Loyal customers should also be rewarded with extrinsic gifts or provided with additional incentives that match other rivaling products. Unfortunately, it is only a matter of time before a new disruptive technology or enhanced product offering enters the market and begins to replace an existing online community's loyal customer base.
- **Member Satisfaction Management** – Continuous community monitoring with regard to member satisfaction should also be measured at this stage. Once a product reaches its maturity stage the only way to prolong its life-cycle is to build new enhancements based on customer feedback. Global

Relay should strive to monitor its progress in this department with annual customer surveys.

**v. Death**

Once an online community matures, it may take several paths including continued growth, change in direction, or termination. Members will most likely leave the community when it is no longer of value or useful to them. However, because it is very challenging to replace established online communities such as Facebook and LinkedIn, if these communities can achieve sustainability then benefits and profits will continue to accrue. However, if communities begin to experience poor participation due to lack of content and contribution, then death is the only plausible outcome. Members will also disengage participation if they believe their identity or personal information may be at risk. Key factors that would result in death at this stage include: poor participation, unorganized contributions, transient membership and concerns around privacy and safety.

- **Poor Participation** – Global Relay should continuously monitor participation in its IM platform to ensure customers have access to the appropriate individuals to conduct their business transactions. Once this community falls below a certain threshold, death will be imminent.
- **Unorganized Contributions** – Customized rosters should be encouraged to provide customers with easy access to the appropriate contacts in their network. Furthermore, facilitating parity between desktop clients and mobile devices will allow for seamless communication regardless of whether or not a user is logged onto the platform.

- **Transient Membership** – Global Relay will have one chance to convince users to migrate to a new IM platform. If their first user experience is not user friendly and intuitive it is very unlikely they will proceed with implementation until forced to as a result of critical mass.
- **Privacy and Safety** – Security will continue to be a key differentiator for Global Relay. Providing customers with assurance through technological documentation that their personal information is protected and will not be distributed to unauthorized personnel will be imperative to sustaining ongoing customer loyalty.

Now that we understand the key requirements of each stage of the online community life cycle, we can put forth a proposed business model and discuss recommendations for distribution of this new technology. An analysis of all primary stakeholders and suppliers will also be necessary to execute this strategy and will be provided in Chapter 5.



## **4: Company Strengths and Proposed Business Model**

A review of Global Relay's strengths will be examined to identify why the company is in an ideal position to leverage its current resources/environment and deliver a new disruptive, collaborative and compliant IM platform to the financial community. At its core, Global Relay is a software development company with over 65 internal developers and over 12 years of focused experience in the compliance message archive industry. Most of the product leaders responsible for developing software at Global Relay have very relevant background experience and come from very reputable companies including IBM, Nortel, Hewlett Packard, Thomson Reuters, and Bloomberg. Key company highlights include:

### **Over 14,000 Compliance Governed Firms Globally**

- 85% USA, 10% Europe, 5% Other
- SEC, FINRA, SOX, FRCP, HIPAA regulated

### **Customer and Partner Successes Include**

- Chicago Stock Exchange and Chicago Board Options Exchange
- 3 General Electric Divisions
- Thomson Reuters (Reuters Messaging Compliance Manager)
- 2 Mitsubishi Divisions
- Full Strategic Archiving Partner of Thomson Reuters
- Over 1000 Prime Broker sponsored Hedge Funds
- Largest downloader of Bloomberg data
- Exclusive FINRA Resource Compliance Provider of Message Archiving

## **4.1 Company Strengths**

Global Relay's proprietary archiving technology and private Data Centers have never experienced a single security breach or incident of data loss throughout its twelve years of operation. With more than 65 in-house developers, Global Relay has the ability to develop and implement an archiving compliance system specific to virtually any business environment operating any number of software systems, including Exchange, Windows, GroupWise, Lotus Notes, Bynari, Exim, Postfix, Qmail, SendMail and Unix Servers. To support their clients, Global Relay has a team of over 130 staff with offices in New York, London, Singapore and Vancouver. They offer 24/7/365 live technical support, as well as an in-house legal team comprised of four compliance attorneys available to offer timely legal, compliance, audit, and electronic discovery expertise. It's technical and support superiorities give Global Relay the edge among all outsourced compliance archiving providers.

### **4.1.1 Niche Focus on Compliance Archiving for the Financial Sector**

In order to become the market leader of compliance message archiving, Global Relay must first dominate a niche within the message archiving industry. Their key market to date has been Broker-Dealers, Hedge Funds and Investment Advisors. As Global Relay has existing core competencies in compliance, the company has decided to focus on electronic message compliance requirements for the financial sector in the United States. As the federal government and regulatory bodies in the United States continue to impose stricter rules and regulations on electronic data messaging, message archiving has transformed from a "nice to have product" to a "must have product" for financial firms. Both the SEC and FINRA now require any registered financial entity to

demonstrate they have an active electronic archive solution in place that adheres to all data retention and electronic discovery requirements. Regulatory audits, stiff fines, and public penalties for non-compliance enforce this. Each firm is also required to have a Chief Compliance Officer (CCO) with full legal responsibility to monitor and enforce company and regulatory processes and policies.

The most recent example of the steady increase in regulatory requirements is the Dodd-Frank Wall Street Reform and Consumer Protection Act, signed into law by President Barack Obama on July 21, 2010. It requires all registered Investment Advisors to now adhere to the same electronic data record retention requirements as Broker-Dealers, which have traditionally undergone the highest level of scrutiny in the industry. Small regulated firms typically do not have the in-house capabilities or available IT cycles to manage the current requirements for message archiving. Consequently, there is a persuasive case for the ROI benefits of a hosted solution, such as the one Global Relay provides (Babineau, 2010).

Some key differentiators that distinguish Global Relay from other generic electronic archive vendors are in-house legal compliance consultation, access to a dedicated audit and electronic discovery team, and access to 24/7/365 tech support. Additionally, the interface, capabilities and storage infrastructure has been purpose-built to always be in accordance with the rules and regulations of the SEC and FINRA. A major requirement that is missing from normal archiving is that all data be backed up to multiple redundancies in a tamper-proof environment. This is very exacting and very expensive to do.

### **4.1.2 Lower Hosting Costs**

Global Relays leases two replicated east/west coast data centers, however own and operate all the storage systems and servers. The bulk purchase of such storage allows Global Relay to benefit from economies of scale, which can then be passed on to customers. This enables Global Relay to gain a competitive advantage over competitors who are reliant on customer-hosted solutions, as the unit storage costs for Global Relay's leased infrastructure are substantially less than typical infrastructure costs incurred by in-house customers. Nevertheless, data storage suppliers are aware of Global Relay's dependency on their solution, which they can then exploit to gain higher bargaining power and increased annual rates, reducing Global Relay's operating margin year over year. Therefore, Global Relay is in the process of building its own state of the art low operating cost data centers as a means of reducing operating expenses over the long run.

### **4.1.3 Strong Customer Base**

Global Relay is currently focusing on three primary market verticals: Broker-Dealers, Investment Advisors, and Hedge Funds. One of Global Relay's greatest strengths is its large customer base of high profile Hedge Fund firms, especially those sponsored by the prime brokers. These firms tend to be very wealthy, which is why large banks want to sell financial assets to them. Therefore, if this customer base standardizes on Global Relay's new collaborative IM platform, banks will likely follow.

The principal forms of electronic data that these customers use to communicate internally and externally are Email, Instant Messaging (IM), Bloomberg Messaging, Thomson Reuters Messaging, BlackBerry Messaging, and Social Media, with each vertical favoring its own unique combination of data communications. By developing

technology that can securely capture, retain, and index each of these forms of data, Global Relay aggregates all electronic communication into one central repository for compliance purposes. Once these messages are captured in the hosted solution, internal rules can be created to monitor and flag specific messages that could potentially pose a threat to internal governance policies within a firm based on keyword matches or phrases. The primary challenge is keeping up with new releases of electronic business communications. Global Relay employs a development team of over 65 individuals to continually update source code and push new releases to customers via a hosted business model. Global Relay needs to dominate these verticals to secure beachheads that are dependent on IM, prior to capturing the mainstream IM compliance market, which would be primarily comprised of large multinational banks. These smaller niche financial firms provide an excellent source of referrals to the mainstream market as they also fall under the same rules and regulations of the financial industry. In order to execute this strategy from a product development standpoint, it will be vital for Global Relay to align its strategy with its internal systems in order to ensure its solution is scalable for large user deployments. Considering the nature of the financial industry, a system outage or crash would be devastating for Global Relay and could potentially erode significant market share, which is why high quality solutions are so important.

#### **4.1.4 Operations Management**

As Global Relay experiences growth in number of employees, customer base, and office space, the operating strategy will be to expand market share in other geographic locations. Over the last year, the company has expanded offices into New York, London, and Singapore. Although these markets do present new opportunity, the vast majority of

target customers are located in the US due to the stricter regulation requirements for electronic data messaging. However, larger international financial firms with operations in the US or selling to US investors must also comply. Regulatory bodies in the UK, Europe, and Australia are becoming similar to the US in regulatory requirements so firms in such jurisdiction are potential customers. The three locations above were chosen based on the size and market capitalization of their financial markets.

During any rapid growth phase, a company will undoubtedly experience growing pains as it attempts to learn and solve new internal policies and procedures. As a result of more than doubling in size over the last year, Global Relay has had to make significant upgrades to its internal accounting, sales, support, HR and billing systems, which still have yet to be fully streamlined. It was only a few years ago that the company relied on a paper filing system for the management of its customers information. As more and more customers began to onboard the system, this process eventually became unmanageable at which point Global Relay made a transition to a Software-as-a-Service (SaaS) electronic customer management console. This system has also become integrated with accounting and support in order to provide more transparency across the company and to increase day-to-day operational efficiency.

#### **4.1.5 Partnership Channels**

Diverse partnership channels continue to be driving forces for market penetration. With over 100 channel partners and key alliances, Global Relay is poised to gain dominant market share in the near future. Email archiving is an ideal complementary service to Microsoft Exchange; therefore, Systems Integrators and resellers of hosted Microsoft Exchange are ideal partners for Global Relay. Global Relay has established a

strong distribution model over the years via its channel sales model. It now accounts for approximately 50% of new sales and previously was much more. Global Relay is also the exclusive IM compliance archiving vendor for all Thomson Reuters customers and the recommended compliance resource archiving provider of the Financial Industry Regulatory Authority (FINRA). These two partnerships will be driving forces for distribution initiatives as outlined in the new proposed business model below. Other notable partnerships include Eze Castle, AppRiver and Apptix.

Global Relay's core strengths are aligned with the market characteristic of compliance message archiving. In order to become the dominant market leader in the compliance archiving industry, Global Relay should strive to capitalize on its current product offering and expand its breadth of services to financial firms by expanding its current IM offering. The company is well positioned in the financial industry because of its established niche focus with Broker-Dealers, Investment Advisors and Hedge Funds. Global Relay's core product, the Message Archive is well known in the financial industry as being a reputable, secure, reliable industry specific solution designed to meet the message compliance requirements of the appropriate regulatory bodies. Recently, the company won a two year RFP process to become the exclusive Compliance Resource Provider of message archiving for FINRA members. FINRA oversees regulation for nearly 4,500 registered Broker-Dealer member firms. This new relationship should result in a stronger position among Broker-Dealers.

## **4.2 Proposed Business Model**

As outlined in Chapter 1, Global Relay's current business model is based on a recurring monthly revenue stream. For a flat monthly rate, financial firms can outsource the compliance archive requirements for their electronic messages to Global Relay without heavy upfront capital investment or ongoing maintenance of internal IT personnel.

However, as identified through the research conducted for this report, a promising business opportunity exists in the world of compliance IM archiving today as well. By integrating a state of the art collaborative IM platform with its existing core product (the Message Archive) Global Relay could potentially unlock a new stream of users to generate revenue via the Message Archive. By fusing its core technology into the new collaborative IM platform, Global Relay will unite the worlds of compliance and community into one consolidated and unique platform for the financial industry.

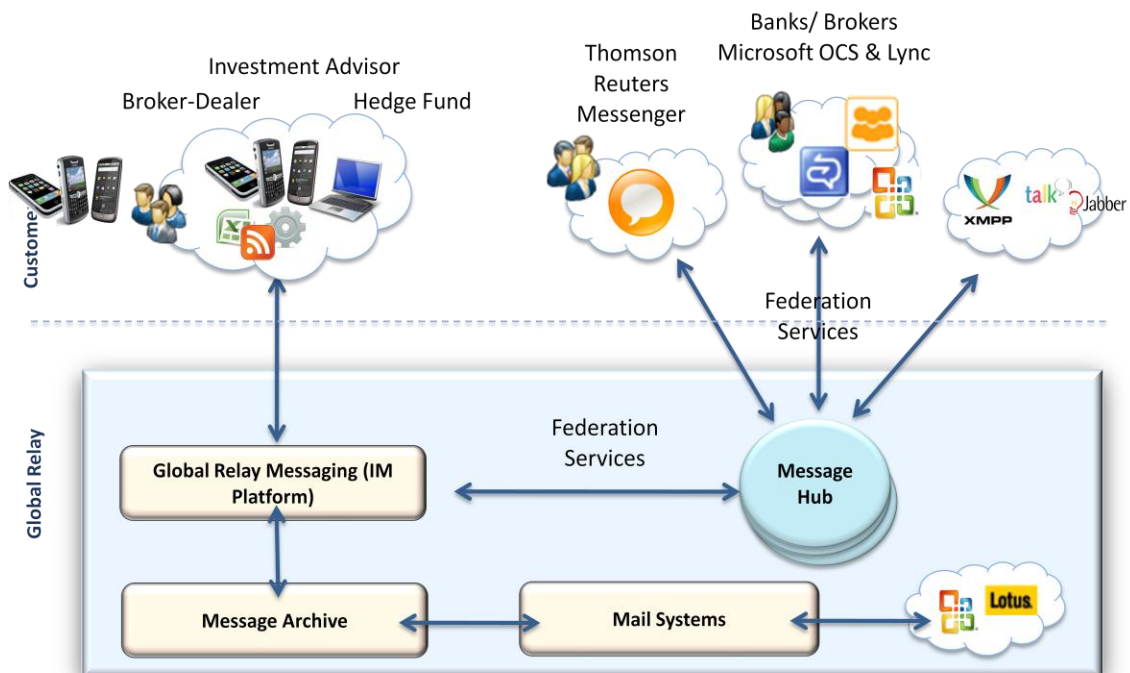
### **4.2.1 Product Platform**

This new collaborative IM platform will allow financial institutions to control which users their employees can chat with online (internal and external to the company) through one central directory worldwide. Thomson Reuters Messaging, Microsoft OCS, and potentially other Extensible Messaging Presence Protocol (XMPP) users will be federated into this community as well and given the ability to chat interchangeably with any member on the Global Relay IM platform. These users will help seed an online IM community for the financial industry. End users will also have the ability to sync



between mobile, desktop and web devices while automatically archiving all their electronic communications in a world class message archive system. All IM conversations will support multi-user chat and adhere to all IM compliance regulation through integrated time-stamped send and receive receipts. Additionally, guaranteed and redundant storage of all messages will be scalable to ensure all IM conversations are properly archived in each customer's Message Archive. Finally, this system will also support offline messaging, which allow users to send messages to their contacts regardless of login status allowing recipients to still access those messages once they log back into the platform. This will be a great benefit to the buy and sell side financial firms, as they will not need to track each other down if the other party is not logged-in online. An architectural overview of the Message Archive and IM platform is provided below.

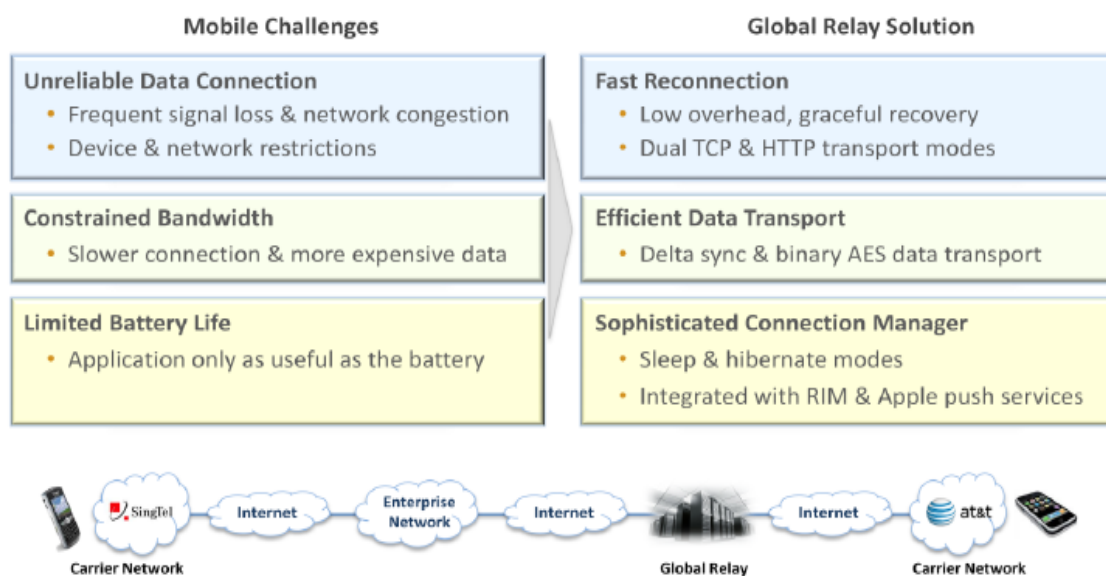
**Figure 4.1 Collaborative IM Platform Integration with Message Archiving for Compliance**



Source: Author

Although Global Relay will not charge users for access to this IM community, it will bill regulated firms based on the number of IM users that are captured in the archive as a result of utilizing the service. The reliability of a turnkey IM infrastructure combined with an extensive directory of financial contacts embedded into an existing message archive will be the key value proposition for this new product. It will be further differentiated due to its ability to synchronize between mobile, desktop and web devices as members of the financial community are becoming more dependent on collaborative devices and applications. Overview of mobile integration is provided below.

**Figure 4.2 Mobile Messaging Integration Model for Compliance**



Source: Author

### Key differentiators of the Global Relay Messaging platform

Global Relay Message will be a scalable, compliant, secure and fault-tolerant IM compliance platform designed to address the electronic messaging requirements of the financial industry. Users will be able to engage in multiple concurrent IM sessions per user with message delivery receipts and read-receipts. This platform will also include full mobile phone synchronization and easy to integrate browser based clients.

## **4.2.2 Target Market**

The primary target markets are members of financial stock exchanges (NYSE, NASDAQ, LSE, CBOE, and CHX) and the financial market data providers listed above. The goal will be to gain early adopter buy-in from the major stock exchange governing bodies in order to push the IM platform out to corresponding exchange member firms. The second component of this phase will be to also gain early adopter buy-in from major financial market data providers such as Thomson Reuters and potentially embed their applications into Global Relay's collaborative IM platform via an Application Programming Interface (API). Global Relay is the exclusive compliance archiving vendor of Reuters Messaging, a commonly used IM client for the financial community. It will therefore federate these users into its collaborative online IM community along with Microsoft OCS users. These are the two major IM clients currently used by most large banks and constitute approximately 35% of the financial IM community. Both will be federated into Global Relay's new online IM community to help increase network effects with existing Global Relay customers, particularly the Hedge Funds and Private Equity firms. Once reputable financial firms and banks begin to adopt this new technology, the product will be pushed out to their customers and contacts; thus creating stronger network effects and an even more compelling reason to be part of a collaborative, compliant financial IM community.

## **4.2.3 Barriers to Entry**

The primary competitors in the financial IM market are OCS, Bloomberg, AIM and Yahoo. Global Relay's primary competitors in the message archive industry are Smarsh and Live Office. Although both groups of competitors present a threat in the

financial IM market, they do not compete directly. As stated earlier, there is currently no standardized IM platform in the financial industry that provides compliance archive capabilities for a unified community. Global Relay's complementary assets, current market share, intricate partnership channel network, state of the art technology and dedicated management team will drive this new product to a level of critical mass in the financial sector. Perhaps the strongest barrier to entry, besides the incredible developmental complexity of integrating a multivendor complaint IM platform into a single unified solution, is providing for the stringent compliance requirements mandated by federal regulators. There are potential large vendors such as Google or Microsoft that have the resources and capabilities of acquiring other hosted archiving vendors should they decide to penetrate this market. The compliance message archiving market is in the midst of a major growth spurt and customers will soon look to consolidate to a commonly accepted compliance platform as the market approaches the maturity stage of its product life cycle. Maximum revenue potential will be recognized at this stage, as customers will migrate to the trusted industry standard, which Global Relay is prepared to provide.

The final and most challenging stage required to execute the proposed business model outlined in this chapter is distribution; therefore, we will now examine the primary stakeholders of our supply chain that will drive this product to market.

### **4.3 Strategy**

The key success factor to Global Relay increasing significant revenue growth via this new offering will be through capturing more users in its message archive system. This can also be driven by IM usage. By leveraging a product management team that understands the compliance requirements of its customers and already has a well-

established core product, Global Relay could be the first vendor to design a collaborative IM platform specifically tailored to the financial industry. This first mover advantage will be further enhanced through the integration of complementary assets such as the message archive and hosted Exchange partners. Persuading users and financial firms to abandon their existing IM clients will not be an easy task and will require buy-in from three essential communities including: financial buy and sell sides (Hedge Funds, Broker-Dealers, and Investment Advisors), financial market data providers (Thomson Reuters, Bloomberg, FactSet, Capital IQ, Interactive Data, Fidessa) and Global Relay's existing client base. Furthermore, key partners and suppliers including FINRA, Thomson Reuters and Microsoft will also heavily drive adoption of this IM platform. Due to the segmented IM structure of the financial industry and scale, it would be impossible to transition the entire community onto a new IM platform simultaneously; therefore, smaller specific communities will need to be targeted in a sequential order in order to achieve critical mass.

## **5: Stakeholder Analysis and Recommendations**

In order to ensure adoption of its new IM platform for the financial community, Global Relay will need to break apart the existing IM communities within this industry by integrating key stakeholders into its supply chain and incorporating multiple service offerings into one unified compliance solution. As explained in Chapter Two, users within specific asset classes in the financial industry have standardized on different IM clients and convincing them adopt a new unified platform will be challenging despite current limitations. More specifically, the Global Relay IM platform will need to be distributed top down from suppliers as opposed to at the end user level. Global Relay has strong partnership/alliance relationships with key vendors within the financial industry, which will be leveraged to seed a unified online IM community for all the various asset classes within this industry. The primary strategy of Global Relay's IM platform will be to drive more users into the message archive for revenue generation, as opposed to charging directly for the use of the IM client itself. Since the IM client will be released to customers free of charge, it is imperative that Global Relay gain access to as many asset classes as possible that require compliance IM archiving. A typical supply chain for the IM compliance market can include data market providers such Thomson Reuters or financial governing bodies such as FINRA. Both of these channels have direct access to Global Relay's core customer base and can be use to distribute its services to hundreds of thousands of users within the financial industry. Integration of widely deployed

enterprise IM system within financial institutions, such as Microsoft OCS, will also help with the seeding of Global Relay’s new IM platform.

Below is a breakdown of the key stakeholders involved in Global Relay’s supply chain

**Table 5.1 Stakeholder Analysis**

Stakeholder	Customer Value	Global Relay Value
Existing Global Relay customers	Integration of IM and email compliance in one system. Well established Hedge Fund community (buy side).	Existing Global Relay customers will be given Global Relay’s compliant IM client for free to help seed a new online community for financial firms and entice adoption by larger banks (sell side).
Thomson Reuters, FactSet, Fidessa (Market data / trading applications)	Enables market data / trading platform companies to integrate compliant IM directly into their applications	Potential access to a large subscriber base (Thomson Reuters – 40,000; Fidessa – 25,000; FactSet – 30,000)
Microsoft OCS / Thomson Reuters Messaging (Enterprise IM clients)	Connects Global Relay’s IM platform to the banking community through the federation of Microsoft OCS and Thomson Reuters Messaging.	Key to execution of strategy – create a financial community connected with a compliant, reliable, secure and scalable messaging system that connects the banks, broker/dealers, hedge funds directly or through now existing market data / trading platforms
FINRA	Enables FINRA member firms to automatically implement a free compliant IM chat client	Potential access to a subscriber base of approximately 6000 firms

Source: Author

Each stakeholder listed above will play an integral role in the adoption of a new online IM community for the financial industry. This is a complex product offering that requires integration with numerous systems and communities. The entire community's value will be heavily based on rapid end user adoption volume. Therefore, distribution will play a key role in pushing out this IM platform to financial firms, as many users may feel attached to their existing IM client. Listed below are the primary distribution channels for Global Relay based on breadth of access to financial firms.

- Strategic Network of Partnerships worldwide
  - Over 100 Partnerships
- Archiving and Compliance for 1000+ Hedge Funds (existing customer base)
  - Covering the major trading partners of most Prime Brokers:
  - Goldman Sachs, Morgan Stanley, Credit Suisse, UBS
- Hedge Fund Technology Partnership Firms (resellers)
  - RFA , Eze Castle (ECI), Matsco (UK), Chelsea Tech
- Hosted Exchange Partners (65+)
  - Apptix, USA.net, AppRiver, Cobweb (UK), TELUS, Intermedia, Bell Canada
- Thomson Reuters:
  - Exclusive Partner for Reuters Messaging and Eikon (financial market data platform)
- FIMA Vendor Alliance (top 12 world banks)
- FINRA:
  - Exclusive Resource Compliance Provider for Message Archiving



Although each stakeholder listed above will allow Global Relay to build strong network effects, some vendors will have access to larger customer volume than others. The key stakeholders of Global Relays supply chain will now be analyzed in greater detail.

## **5.1 Hedge Funds and Banks**

The overall goal of this online community will be to connect the buy side financial institutions with the sell side through a standardized, collaborative IM platform. Banks and Broker-Dealers are heavily driven by research and often use Thomson Reuters Messaging or Bloomberg Chat to find Hedge Funds that are looking and willing to buy their securities. Global Relay's strongest advantage is that it is currently recognized as one of the reputable market leaders in compliance message archiving and already has a huge, established user base in the Hedge Fund community. By federating Microsoft OCS and Thomson Reuters Messaging into its integrated IM Platform, Global Relay will be more likely to achieve a critical mass with the financial community than if it were to isolate these two major industry IM providers from its solution. This way, users still have a couple different IM clients to choose from; however, the entire community will be integrated into one platform for compliance purposes and control. Ideally, even if users choose to stay with Microsoft OCS, they will still archive their IM communications into Global Relay's archive, which is the company's primary revenue generating tool.

## **5.2 Thomson Reuters**

Any customer utilizing Thomson Reuters Messenger is consequently archiving all of their IM communications into Global Relay's archive due to the integrated partnership

between these two companies. Thomson Reuters chose Global Relay for the archiving component of their IM system because of Global Relay's market position. Since IM communication is not Thomson Reuter's core competency there is no direct competition on the IM side and the company has decided to federate their IM platforms. Currently, Thomson Reuters rebrands Global Relay's Message Archive into their IM client and has an established profit sharing agreement with Global Relay. Through its partnership with Thomson Reuters, Global Relay can open its IM platform to approximately 40,000 financial companies worldwide. This will play an essential role in establishing a reputable online community and there is a considerable mutuality of interest.

### **5.3 Market Data Providers**

Thomson Reuters core competency is its market data trading applications. Federating Reuters Messenger into Global Relay's IM platform could also help facilitate stronger network effects for Global Relay's IM platform. There are a number of trading applications that financial users currently utilize to execute transactions. However, not all of these products have integrated IM tools. By partnering and integrating via APIs with some of these application providers, Global Relay could distribute it's offering to an untapped financial community in need of compliance messaging services. Some potential customers who utilize data market provider may already have a message archive of their own; however, there is an overall industry trend towards software collaboration as identified in Chapter 3. Therefore, providing an integrated hosted archive solution with compliant IM capabilities will definitely be an attractive competitive advantage for Global Relay.

## **5.4 Financial Industry Regulatory Authority (FINRA)**

As discussed previously, FINRA is the governing body responsible for enforcing compliance regulation of its 4,500 member firms, which are registered Broker-Dealers. As the exclusive Compliance Resource Provider for FINRA, Global Relay can leverage its relationship to target this community for its new IM platform among other services. FINRA, through the Compliance Resource Provider program, assists Global Relay in marketing its archiving services and message platform, which presents an enormous opportunity to capture a community of financial traders that are predominantly using AIM for IM communication. As part of its relationship, Global Relay has agreed to provide its products and services (including the Message Archive) to registered Broker-Dealer member firms at a significantly reduced rate in order to penetrate this community. Currently, Global Relay has a minority market share within the Broker-Dealer vertical, so commoditizing services for Broker-Dealers in order to capture larger market share was adopted as its strategy. Additionally, by integrating its IM platform free of charge for Broker-Dealers, Global Relay will be building out an online community for the sell side that is looking to conduct business with the buy side, primarily Hedge Funds. Global Relay currently holds strong market share with Hedge Funds (buy side) and if these existing customers adopt a new IM platform that is fused into their current archive free of charge, then the Broker-Dealers will have even greater incentive to follow suit. As a result, Global Relay will increase profits through the additional users stored in the message archive. Uniting Broker-Dealers with Hedge Fund organizations will be a key competitive advantage for Global Relay and will provide strong barriers to entry for other potential competitors.

## **5.5 Hedge Fund Technology and Hosted Microsoft Exchange Partnership Firms**

These vendors of services currently provide key complimentary products and services to Global Relay's core customers and have great distribution capabilities for the company. A large percentage of Global Relay's Hedge Fund clientele is driven through referral and reseller partnerships including Eze Castle, which is a systems integrator that focuses on IT deployments for Hedge Fund firms. Fusing Global Relay's IM platform into its partnership agreements will help fuel the adoption of an online community within this vertical.

Microsoft Exchange partners are not focused on specific verticals and provide the most commonly deployed email system in the world. Microsoft Exchange is a commoditized service that has become an industry standard for most business organizations in need of email services. In order to capture email messages into any message archive, an email platform such as Microsoft Exchange is required. Although not integral to the establishment of an online community for the financial sector, bundling Global Relay's IM platform into select packages specific to financial firms would help increase community membership participation through this channel.

By targeting each supplier listed above in gradual phases, Global Relay will increase its probability of achieving critical mass for its collaborative IM community in the financial sector. Global Relay has the appropriate distribution channels to accomplish this strategy through carefully established alliances. Over time, if each community gradually increases its membership base a universal, collaborative IM system will arise for the financial community.

## **6: Conclusion**

This report has identified and analyzed an untapped market opportunity ideally suited to Global Relay's core competencies and resources. The purpose of this report is to help Global Relay increase cash flow by developing new revenue streams and to become the market leader in the electronic message archive industry. The final recommendations took a number of factors into account such as:

- Current industry trends and issues
- External market analysis information
- Key success factors
- Company Strengths
- Proposed business model
- Supply chain distribution

After evaluating these factors in great detail, the following recommendations have been proposed:

- 1) Leverage the existing Message Archive product and embed it into a collaborative IM platform specifically designed to address IM compliance requirements for the financial industry
- 2) Regularly monitor and pursue key success factors as outlined in Chapter 3 in order to facilitate a smooth transition through each of the preliminary stages of the

online community life-cycle including: inception, creation, growth and maturity, while avoiding death.

- 3) Focus on achieving critical mass through strong network effects between key vendors, suppliers and partners. This market cannot be won simultaneously; therefore, smaller, targeted stakeholders must be pursued one at a time.

Global Relay will most likely have one opportunity to win over financial services customer with a new collaborative IM platform for compliance. This customer base is not tolerant of mistakes when it comes to compliance and to consider switching, will demand a superior product offering in comparison to the industry standard. Global Relay is well positioned to leverage its current product/industry expertise, existing beachhead client base, partnership channel and proven core product (Message Archiver), to create a new collaborative messaging platform for the financial community. If Global Relay can deliver a much need IM solution to this already established market, the company will enjoy strong barriers to entry due to strong network effects of a tightly integrated community.

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