



Before You Buy!

10 Questions You Need To Ask A Collaboration Vendor

Executive Summary

In just the last few years, the enterprise collaboration software market has become one of the most crowded areas in IT. It seems as though new vendors are appearing on a weekly basis while traditional software vendors are working feverishly to retrofit their legacy offerings by introducing new collaboration add-ons. Further clouding (pun intended) the issue are the various delivery models available to customers today – on-premise, on-demand and cloud-based options are available. This combination of a multitude of vendors and delivery models has created a confusing landscape, where messaging collision has become the rule, not the exception. This primer is intended to help those organizations researching enterprise collaboration by arming them with the most important questions to ask the collaboration vendors they are evaluating, in hopes of helping them make buying decisions based on empirical evidence, rather than flashy positioning and messaging.

Table of Contents

Is your product extensible to meet the changing face of the collaboration landscape?.....	1
Does Your Product Support Standard Governance Frameworks?.....	2
Does Your Collaboration Product Integrate with My Existing Technology Landscape?	4
How Does Your Product Support Access Standards?.....	5
How Flexible Are Your Data Location Requirements?	6
How Does Your Product Administer Security?.....	8
Is Your Product Standards Compliant? ...	9
Can Your Product Scale With Our Planned Adoption Rates?.....	10
How Robust Is Your Solution?.....	11
How Viable Is Your Business Model?.....	12
In Closing.....	13
About the Authors	14

Is your product extensible to meet the changing face of the collaboration landscape?

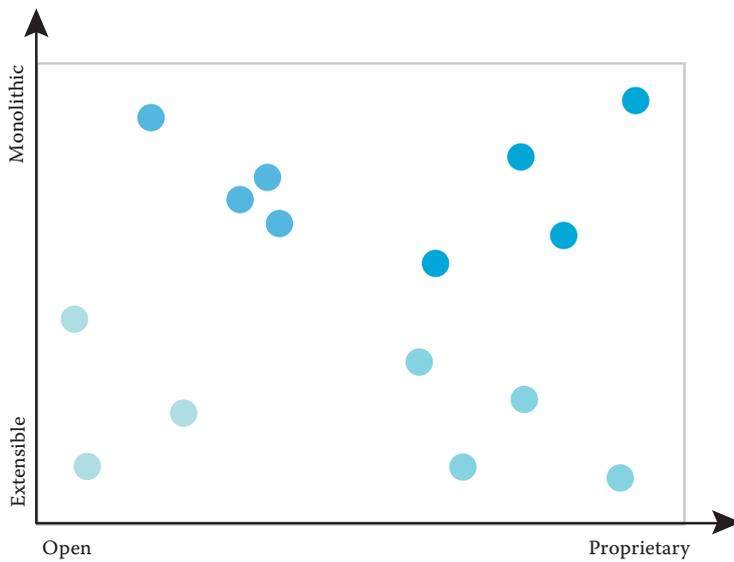
Quick Take

This is quite possibly the most important question, above all others, which you should ask collaboration vendors being evaluated. The answer will quickly identify a purpose-built solution, or a legacy one that has been retrofit to be quickly brought to market to capitalize on a growing market opportunity, designed without the customer in mind. The objective is to determine whether or not the solution you are evaluating is capable of growing with your business – easily integrating with new applications and data sources, providing an ease of administration to create new mechanisms (portals, mash-ups, dashboards, project sites, etc.) to drive a wider adoption of collaboration internally.

Why it's So Important

In an era when customer demands change as quickly as the introduction of new technologies, the needs of an enterprise has become very fluid. This fact requires that any product being considered must include absolute extensibility, so that it adapts to match the organization's functional needs. Traditionally,

software vendors tend to overlook extensibility of a product while focusing on the current day needs. Moreover, the most innovative collaboration products have put extensibility in the hands of less technical users by allowing them to create data mashups, automation of reporting, workflow, etc., without any kind of programming background. This not only ensures a level of “future proofing”, but also fosters widespread adoption beyond the traditional technical user base.



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The extensibility requirement is not just important for keeping up with the changes in functional requirements, it is also very important for customization and integration purposes. No two businesses are the same and needs vary based on the end-user and customer requirements. This demands an advanced level of customization of the product in question and it can only be achieved through an extensible product and/or platform. Today’s enterprise ecosystem – the set of applications and services that drive the business – are comprised of a healthy mix of both on-premise and on-demand software.

This landscape requires integration of legacy applications, as well as with web-driven applications. Most of these legacy applications were not designed with the Internet, much less collaboration in mind; this will be discussed in more detail later. Such integrations need to be easy to administer and should be capable of being executed without any additional services cost. This calls for the product and/or platform to not only be extensible but also offer a rich user experience and interface, which allows users without programming skills to complete integrations.

There are also some technical nuances that should be considered as well. For collaboration specifically, where information can be in many transitional states, collaborative solutions which leverage RESTful implementations have proven to be to have distinct

advantages over traditional web services architecture. These implementations allow for the consumption of other web services exposed with XML, from inside the collaboration application, without any need to change the existing architecture. This puts the RESTful applications at an advantage and makes extensibility very easy to achieve. Moreover, most of the modern day programming languages support REST and this makes the product technology/language agnostic. It should be noted that a monolithic system cannot offer such extensibility due to the complexities involved in such architecture. The greatest advantage of REST, being lightweight and simple, makes a RESTful product/platform easily extensible.

Does Your Product Support Standard Governance Frameworks?

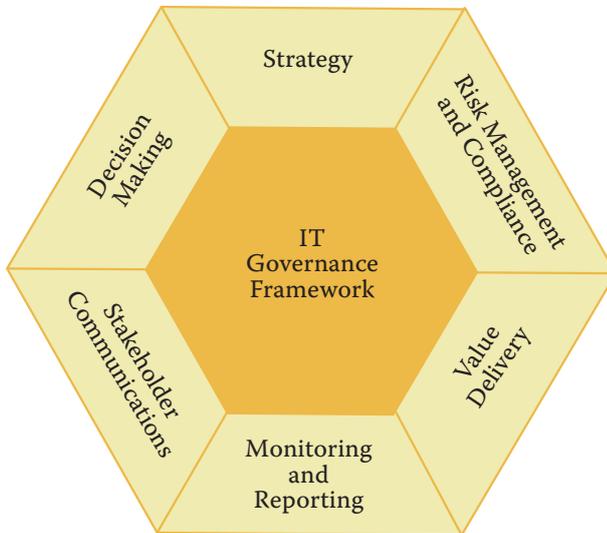
Quick Take

As with the previous question, this probe is designed to identify a truly purpose-built solution, from one that is being associated with a market that perhaps it isn't duly appropriate for. Specifically, there appears to be significant messaging collision in the collaboration space, where point products for social networking are being incorrectly identified (most often by the vendors themselves) as enterprise collaboration solutions unto themselves. Unfortunately, this has created a situation where many organizations, after evaluating social networking software, have a tendency to think of collaboration solutions as 'wide open' or unsecure, as it relates to governance.

Why it's So Important

As the velocity of business continues to accelerate, a high degree of responsibility has been applied to boards of directors to ensure compliance with standards and regulatory requirements. This includes ensuring sensitive intellectual property remains securely under the organization's control. This desire for control is being undermined in organizations across the globe by employee's demands for wikis, blogs, social networking and other so called

“Web 2.0” tools. Thus enterprise collaboration software comes under increased scrutiny in terms of governance support.



In particular organizations should seek an offering that allows for unified governance over a widely distributed system.

Organizations need to assess the potential breadth and depth of deployment of a piece of collaboration software. In the event that this solution will potentially touch sensitive or proprietary information (as will often be the case with collaboration software) evaluators should ensure that the applications supports standard governance frameworks and the IT department retains the ability to have visibility over the application, its use and the security of the underlying data.

In particular organizations should seek an offering that allows for unified governance over a widely distributed system. This will allow for control over which services can be used and whom can access the data. They should also ensure the application gives the ability

to measure outcomes against internal policies and regulations. Unified governance will also mean that users have permissions that apply over external systems. In this way, for example, a user in a collaboration offering can access content dynamically from external software— and the permissions that allow this are federated from the collaboration software.

Does Your Collaboration Product Integrate with My Existing Technology Landscape?

Quick Take

One example of continued ROI when it comes to collaboration solutions is their ability to integrate with existing technology investments. The most valuable collaboration solutions are those that not only provide the capability to process and share data and information across boundaries, but also those that allow organizations to breathe life into legacy applications, in a sense “cloud enabling” those applications so that they can continue to drive value in an “Enterprise 2.0” type of environment. This includes not only acting as an effective presentation layer, but

also unlocking that data so that it can be shared across teams. The technology leaders who originally invested in these legacy applications will see this as a very positive addition to the overall information fabric of the company.

Why it's So Important

Until recently, most enterprise software came from a small number of vendors marketing “best of breed” solutions. These solutions were largely comprised of add-on modules, purchased separately by the customer, which in turn would work with the central piece of software. With a move towards niche collaboration products, more organizations are using a host of software offerings for discrete point solutions.

While this move has resulted in organizations being more likely to find a solution that solves their particular problem, it has led to issues around integration— both with work processes and with other software solutions, especially those legacy applications that are deeply embedded within the day to day business operations. Today organizations need ensure that an integration framework is a central part of their due diligence process. This capability to include legacy applications in the collaboration mix, effectively extends their lifetime, further extending the value they provide to the business.

Care needs to be taken to identify and document the employees likely to come into contact with the software and a thorough assessment of their current workflows should occur. Customers should assess how readily the proposed collaboration software can be customized to their particular use.

Any assessment needs to ensure that the solution has sufficient records management and archiving options to comply with both internal organizational policies and the broader regulatory framework, described herein.

Similarly, and as aforementioned in this paper, organizations should assess the data formats used by the software and always seek to use software that supports the relevant open data

formats. This will continue the theme of ‘future proofing’ your collaboration software investment.

How Does Your Product Support Access Standards?

Quick Take

As will be discussed in this paper, effective collaboration solutions must demonstrate capabilities in the areas of command and control, to differentiate themselves from the typical “wide open” nature of social networking point solutions. Enterprise solutions must provide administrators and data owners with ability to control access to business data, in a highly modular and tailored fashion.

Why it’s So Important

Federation is a term used to describe both the inter-operation of distinct software systems, and the ability to assign identity across multiple pieces of software. Elsewhere in this paper the issue of data portability is discussed, so this particular section will look at the issues surrounding identity federation.

Customers should look for software that integrates with their existing directory service— many solutions allow for both user authentication (ie enabling a user to “sign in” to an application) but also more granular user permissions, enabling stakeholders and administrators to set user permissions and have those reflected in the varying applications an individual employee uses from day to day.

As organizations, and the employees within those organizations, deploy a large number of discrete offerings, it becomes more apparent that there is a real need to reduce the duplication involved in user access and authorization. This is especially important for collaboration solutions which, by definition, tends to touch more employees, using a greater variety of other products than almost all other software classes. As organizations become more successful in driving internal adoption of the collaboration solution, this challenge is increased exponentially.

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administrators to set user permissions and have those reflected in the varying applications an individual employee uses from day to day.

The most common route for federation of this sort is via Lightweight Directory Access Protocol (LDAP) — prospective customers should ensure a prospective collaboration application integrates with LDAP at a granular level that allows advanced permissions for user groups, user roles etc— in this way the collaboration product will be highly flexible for the organization's needs. This should be a gating requirement for any collaboration solution you evaluate.

How Flexible Are Your Data Location Requirements?

Quick Take

There are many options today when it comes to delivery models available for collaboration solutions. Ultimately you will decide on which is best for you by weighing many factors, such as installation, administration and access. One area that cannot

be overlooked, however, is the data location requirements your organization may follow.

Today there are three broad possibilities for software delivery;

- 1. Delivered from servers behind the enterprise firewall (on-premises)*
- 2. On shared external servers, hosted by the software vendor (SaaS)*
- 3. On dedicated, but externally managed, servers (hosted)*

Why it's So Important

Traditional enterprise software typically dictated that information lived on servers within the enterprise itself or, less frequently, on server farms from an outsourcing provider. With the advent of Enterprise 2.0, the adoption of cloud computing generally, and software as a service (SaaS) specifically, the lines have become blurred as to where data physically exists at any given moment.

This, combined with the emergence of consumer social networks, has opened user's minds to data being held externally, especially given the distributed nature of enterprise collaboration.

While purists would argue otherwise, there is no right or wrong way to deliver software. Rather, it is important that customers have the ability to move data as they see fit, to match fluid business objectives. Many collaboration software vendors are providing their offerings in a way that allows customers to choose the delivery mechanism most appropriate to them.

Many enterprise customers, for example, currently require software to be hosted on their own physical servers. However, many organizations have been willing to move data off-site as cost and maintenance benefits become more evident. Therefore it can be seen that enterprise collaboration software that allows for a high level of flexibility in terms of data location is preferable to software that is more prescriptive. Whatever your choice, it's most important that your vendor gives you that ability to choose. With the continued reduction of traditional boundaries that have made up networks and computing environments, this flexibility is critical for a successful collaboration deployment.

How Does Your Product Administer Security?

Quick Take

As described elsewhere in this paper, to draw a clear line between strictly social network software from true enterprise collaboration solutions, questions in the areas of access and security must be answered. It's typically the larger organizations today that are grappling with the best way to harness collaboration technology—those same organizations are the ones with the most stringent security guidelines.

Why it's So Important

Along with the feature capabilities of the product, security is clearly a very important item to be considered. There are several aspects of security that must be accounted for: security of the application; data integrity; access control and, if consumed as a service, the security of the underlying infrastructure. This is not only for the sanctity of the data in the collaboration process, it is also crucial for satisfying regulatory compliance requirements.

In this era of web based applications, it is important to consider security proactively.

An enterprise collaboration product should not only be devoid of vulnerability, it should offer fine grained control over the user access to the application. Even here, REST based applications (described herein) are more helpful than the others when it comes to security. With the REST's use of an URI-based (Uniform Resource Identifier) approach, the enterprise security team can apply ACLs (Access Control Lists) to the service itself but also to every resource handled by the service. In the enterprise setting, where compliance becomes a crucial issue, the transparent approach to security employed by REST-based applications becomes all the more important than the approach used by other protocols.

Is Your Product Standards Compliant?

Quick Take

Several standards-related topics are covered in this paper, but it's important to tie them together for the reviewer of collaboration solutions. Ensuring your collaboration solution is standards based not only contributes to better integration and security posture, but also drives greater ease when it comes to customization and any related programming that might be required.

Why it's So Important

When it comes to data, it is important to take standards seriously. This becomes all the more important when storing data on third party infrastructure. Even though the standards can be proprietary, the support for open standards in the product is crucial. Open standards help deliver good governance, freedom, innovation, etc. Open standards are crucial for application interoperability and data portability. They are also crucial for the deployment of the product in many different environments.

Once again, there is an advantage to RESTful applications. They

take advantage of open standards such as XML, JSON, XSLT, WSDL, etc. Moreover, REST speeds up data loading (both into and out of the solution) using programmable interfaces. To leverage this advantage calls for a collaboration product that utilizes such open standards. Support for these standards ensures an improved data interchange and exchange, critical to any collaboration deployment. Taking it a step further, products that are both open standards compliant and open source based could prove to be the most attractive option available for the business, as they are completely empowered without any vendor lock-in. This allows flexibility to reign supreme.

Can Your Product Scale With Our Planned Adoption Rates?

Quick Take

Many of the topics covered thus far have been angled toward ensuring the technology is the right fit for your business, prior to vendor selection. One area that cannot be overlooked is one that might not be apparent till after selection and deployment – how well can the solution scale post-deployment? This question is extremely important for those organizations who wish to see the collaboration solution widely adopted, not only within their own network, but also by partners, vendors and customers. As such, the scaling ability of the solution is a key area to investigate.

Why it's So Important

Two important parameters to be considered while evaluating the scalability of a collaboration product are users and traffic. In an enterprise, as the number of users of the product increases, the complexity of their actions also increases. If adoption becomes viral, the increase in number of users could happen overnight. Along with this increase, the volume of data under collaboration is also growing exponentially. The solution being evaluated should be able to scale rapidly to meet these demands. A highly scalable product is one which offers consistent performance in terms of response to users, even if the number of users doubles, triples,

quadruples, etc. In the case of collaborative web applications, traffic is another important parameter which should be taken into account. Will the product scale well if and when traffic suddenly explodes significantly?



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Scalable products not only reduce the deployment time but, also, reduce the costs significantly. Thus, the scalability of the product becomes one of the important metrics in the enterprise collaboration software checklist. Even here, WOA (Web Oriented Architectures) and REST hold advantage over the other traditional technologies. Programming standards imposed by the REST-based implementations help the product scale significantly. The underlying architectural model of REST and any product that takes advantage of REST can leverage the same level of scalability as today's web.

When the software is consumed as a service, the underlying infrastructure must be massively scalable. Along with the robustness and resiliency requirements, described next, in terms of performance and quality, the scalability of the infrastructure becomes paramount to success. In fact, in this era of cloud computing, a highly scalable infrastructure is easily available at a very low cost. It is important to consider if the service, while being highly scalable, is also robust. This takes us to our next qualification.

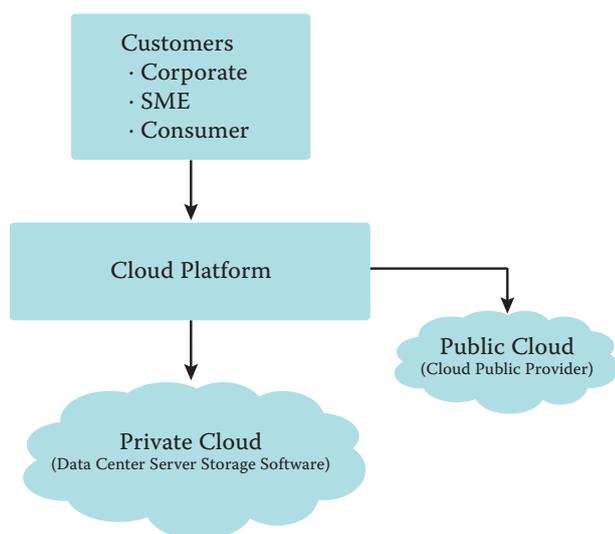
How Robust Is Your Solution?

Quick Take

This question may seem somewhat esoteric, but given the requirements of enterprise collaboration solutions, it's an important one. As your collaboration deployment widens and adoption scales, the underlying performance will become either a gating or enabling factor for even wider-spread adoption.

Why it's So Important

Enterprise collaboration software architectures should offer high performance in order to improve the quality of the business process, while keeping risks under control. The typical bloat associated with monolithic architecture makes it unsuitable for the agile collaborative tools needed for today's enterprises. This 'heavy' architecture not only affects the performance but also increases the risks considerably. Even the pluggable architecture (add ins, modules) cannot offer the level of performance needed by the modern day enterprises.



This has led to a strong interest in WOA and vendors, especially in the collaboration space, are relying on it more and more. WOA is not only robust but when coupled with the caching capabilities and low bandwidth needs of REST, offers a superior performance needed for the enterprises. Any evaluation of enterprise collaboration tools must ensure that the product takes advantage of WOA and REST. This architecture makes integration, interoperability and federation (all described herein) much easier to achieve.

If you are choosing the product to be delivered as a service (on-demand software), along with the above requirements for the robustness of the software, it is important to consider the robustness of the underlying infrastructure. Is the infrastructure dynamic and offers various flexible configuration options? Are the application and infrastructure resilient enough to handle mission critical processes? Is the service highly available? What is the SLA offered for the service? These are some of the questions one should ask the provider to verify the robustness of the infrastructure.

How Viable Is Your Business Model?

Why it's So Important

There is no Quick Take here, as this is one of the most important questions you can ask for prospective vendor.

As you build your business case and prepare for your evaluation, one question that should be answered to save both time and resources, is one that asks how viable is the business model of the prospective vendor? Are they supplying a vitamin, or a complete solution to a business problem and need? Do they have examples of working with many types of organizations (in your space and beyond), helping them solve their collaboration challenges? This question was placed at this point (the end) of this paper in part to illustrate a point. There may be several solutions that meet some aspects of requirements set forth, some much better than others. This extreme competence in one area might lead you to consider them over others, but at the end of the day, you must ensure the vendor will be around to continue to support you and your adoption plans.

Modern software development techniques along with cloud development and infrastructure services mean that the barriers to entry for a software company are much lower than ever before. That, coupled with the fact that enterprise collaboration is an emerging market without dominant incumbents, has created a proliferation of offerings from new and unproven vendors.

As such, prospective customers need to assess the ongoing viability of the software company. This should be seen as a core due-diligence test, just as important as assessing the suitability of the software itself.

Customers would be well advised to seek information about the vendor's customer successes. Do their customers continue to use and innovate on top of their offering? Are they so pleased that they've done case studies with the vendor, in essence, linking their brand with the vendor's? Have independent industry analysts positively recognized the vendor based on market evidence and research? Does the vendor warrant industry coverage from trusted publications? Affirmative responses to these types of questions should be considered positive additions to your due diligence activities.

Additional Reading

1. RESTful Application Development - http://en.wikipedia.org/wiki/Representational_State_Transfer
2. Service Oriented Architecture (including Web Oriented Architecture) - http://en.wikipedia.org/wiki/Service-oriented_architecture
3. Uniform Resource Identifier - <http://en.wikipedia.org/wiki/URI>
4. Diversity Limited Blog - <http://diversity.net.nz/>
5. Krishworld Blog - <http://www.krishworld.com/home>
6. Additional industry commentary on Collaboration Solutions — Forrester Wave Report on Collaboration Solutions
http://campaign.mindtouch.com/Forrester_Wave

In Closing

The intent of this paper was to provide an impartial view into best practices for the selection of enterprise collaboration solutions. Ultimately, you will decide which type of solution is the best for your business objectives. As you continue to investigate this rapidly growing market and its innovators, feel free to return to the author's blog (<http://diversity.net.nz/>) as there may be new developments or updates to the material.

You can find more information in the Additional Reading section, at the end of this document.

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The writing team for this paper is comprised of respected industry thought leaders, experts in the areas of collaboration, internet architectures and open source software.

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