FROST & SULLIVAN

50 Years of Growth, Innovation and Leadership

Selection and Use of Collaboration Tools to Maximise Team Performance

How collaboration products and services are helping companies harness the productive potential of their teams

CONTENTS

EXECUTIVE SUMMARY

Even at the best of times, the most effectively managed organisations are constantly seeking to improve the performance and productivity of their individual employees, and the teams and groups of which they are part.

These are very far from the best of times, and no business can afford *not* to look at ways to improve the performance of its people. Getting this right can give an organisation a significant advantage over its rivals, while getting it wrong can threaten its very survival.

Many organisations employ smart people with the knowledge and experience to address the problems they face, as well as technology solutions that can help them jump on opportunities as soon as they arise. However, in many cases these essential skills, vital knowledge, and solutions tools cannot easily be found or accessed by employees when they need them. That can lower productivity, demoralise workers, and negatively impact the company's bottom line.

Getting this right can give an organisation a significant advantage over its rivals...

Figure 1: To maximise performance and benefits to a business, teams must have immediate access to the shared resources of information and expertise.
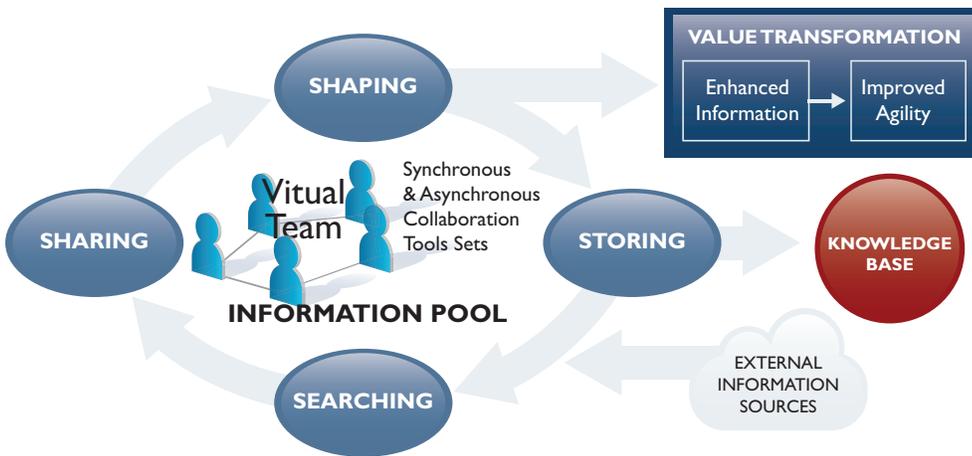
Source: Frost & Sullivan

A great deal has been published about the important contribution that collaborative working can make to teams with mobile and widely dispersed members. However, collaboration products and services—such as videoconferencing, Web conferencing, and enterprise social media—can also make a significant difference to the performance of all teams, including locally based departments, or groups in which only a few individuals work remotely.

By *virtual* we mean a team mainly consisting of members that are physically in different locations, although some may be office-based. Participants may not belong within the same organisational hierarchy, but rather have been brought together to provide the right mix of skills and experience for a specific project or an ongoing business activity.

This white paper examines the challenges the leaders of these virtual teams face, and provides an analysis of the latest collaboration technologies that can have a direct, positive impact on the way virtual teams function. We focus on the difficulties in maximising the performance of employees and the teams they work within, and examine how collaboration technologies, correctly selected and deployed, can positively impact the results that organisations can achieve. Used correctly, collaboration products and services can enable companies to maximise team performance and innovation, tap into valuable expertise and information in a timely manner, and speed decision-making and customer responsiveness.

THE CHANGING PATTERNS AND STYLE OF WORK

The modern business environment is very different from the workplace of even just 10 years ago.

The modern business environment is very different from the workplace of even just 10 years ago. New technologies and the pressures of rapidly changing economic conditions have created a complex value chain of interdependencies between suppliers, customers and partners for all but the very smallest of organisations.

Frequently, in order to accomplish the most basic business processes, companies and their employees must work closely with colleagues located in a different part of the city, the country, or even the world—or with people based at home or on the road, as well as with people outside their organisation.

Different team structures have emerged to help businesses cope with this new way of working. Notably, leading companies are increasingly using the *matrix team format*, in which individual members of the team may have many bosses, depending on the task they're working on.

Figure 2: The virtual team faces complex challenges to achieving maximised performance.

Source: Frost & Sullivan

Increasingly, the individuals in a team need to be highly mobile—so-called "nomad" workers, who move among office locations, visiting customers and suppliers. Or, they may be home-based, teleworking on either a full-time or a part-time basis.

As the diagram above illustrates, the virtual team must be able to operate effectively in a shifting, uncertain environment, one in which even the most routine of tasks can be complicated by issues of time, geographic distance, organisational cultures, language, regulation and government policies. And the nature of this environment means that individuals and teams must be able to develop relationships and networks beyond their immediate organisation, and outside the boundaries of the traditional enterprise.

Furthermore, virtual teams can be frequently bogged down by too many meetings, divided loyalties, conflicting objectives, information "versionitis" and hidden or inaccessible information. Poor process flows hamper decision-making, slowing the response to customers' needs and competitors' actions. Poor search capabilities can make it impossible to track down and access existing information and expertise for re-use on different projects.

So an essential key to enhancing performance is breaking down the silos of information and expertise within the team, to encourage sharing and tutoring among individual members.

How Virtual Teams Work

Years of research has documented the benefits companies can gain by properly organising individuals into effective teams. Groups of people can be far more effective at solving complex business problems and helping meet companies' objectives than individuals working in isolation.

But the quality of communication and personal interaction among team members is at the heart of effective working, and not all companies are good at supporting group collaboration. Many of the barriers to productive teamwork apply whether members are co-located or situated remotely. Direct face-to-face contact has been shown to offer the most immediate benefits in the development of a team, particularly in the earliest stages, when individual members may be getting to know one another for the first time. At all times, clear, unambiguous communication is vital, and it is through a failure to achieve this that misunderstandings and conflicts arise, sometimes with disastrous consequences.

Research supports the intuitive notion that virtual teams in which there is only minimal direct contact among members can suffer from a lack of bonding. The quality of interpersonal interactions between team members is important in two respects. First, poor interactions lead to poor communication, leading to mistakes and sub-optimal performance. Second, the lack of good interpersonal experiences can result in team members becoming unmotivated, failing to contribute to the collective effort, or even disrupting the common goal of the team.

However, it is not usually practical—or even effective—for most teams to meet in person every time they need to communicate. Therefore, more "traditional" forms of synchronous and asynchronous communication—including the telephone, e-mail and shared documents—typically comprise most communications among team members. But an overreliance on

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these methods brings its own problems. For example, a lack of communication—a perceived "silence" if someone doesn't return a phone call or reply to an e-mail—can erode confidence and reduce the productivity of the group.

INTEGRATING COLLABORATION INTO BUSINESS STRATEGIES AND PROCESSES

Companies that get the most from their investments in collaboration are usually those that see its deployment as part of an overall business strategy—and one that focuses on improving long-term performance, as well as reducing cost.

A top-down approach is needed to ensure that the effort of enhancing teamwork through collaboration is an integrated part of the business strategy. This requires clear leadership and support from the executive level of the company.

The approach to selecting and deploying collaboration technologies should follow the best practices used in implementing any major change project, with the executive leadership providing:

- **Inspiration**—Supplying the vision of how changing the standard patterns of work can both improve the performance of the company and make each person's job more enjoyable and satisfying;

- **Motivation**—Giving ongoing direction and encouragement through the initial deployment stages to the point at which collaborative team working is considered to be "business as usual" within the organisation;

- **Empowerment**—Ensuring the appropriate collaboration products and services are in place, with appropriate training and support available for those needing it; and

- **Reward**—Putting in place an incentive scheme to help foster the use of collaboration and embed it within the DNA of the enterprise, making the sharing of information and expertise the everyday practice.

The rapid, company-wide availability of a collaboration product or service may not produce the best performance improvements, or its benefits may not be as easily identified and tracked. Success in instigating a culture of collaboration may require a staged approach, rather than a blanket deployment, as companies select the business functions, teams, or projects in which implementation can most readily be controlled, monitored and tracked.

BOOSTING THE BOTTOM LINE—MAKING COLLABORATIVE TEAM PERFORMANCE PAY

Smart managers know that, in a challenging economic environment, saving money can get you only so far.

Smart managers know that, in a challenging economic environment, saving money can get you only so far. As important as reducing costs is, boosting productivity and agility will ensure that the company is better positioned to take advantage of new opportunities as they come along.

According to recent research by Frost & Sullivan, businesses deploying unified communications and collaboration technology can see a two-to-five-year advantage over the competition. Businesses report using collaboration tools to improve business processes and drive greater innovation. The direct benefits can include shorter decision-making, faster product development—bring more products to market more rapidly, closing more sales, and being able to more quickly satisfy customers.

Until recently, advanced communications tools such as Web and videoconferencing have been sold primary on their ability to replace travel, saving the company money through reduced expenses. Often factored into this calculation—but notoriously more difficult to quantify—are the softer, more human benefits that can accompany travel replacement, such as less wasted time hanging around airports and more time with the family.

COMPARING TYPES OF COLLABORATION—WHICH TO USE AND WHEN?

Broadly, collaboration tools can be categorised as synchronous ("real-time") and asynchronous types, with each type capable of being delivered as either a product or a service. Synchronous collaboration allows both parties to immediately exchange or share information without delay in a decision being made on that information.

Figure 3: Optimising social interactions is critical as team forms.
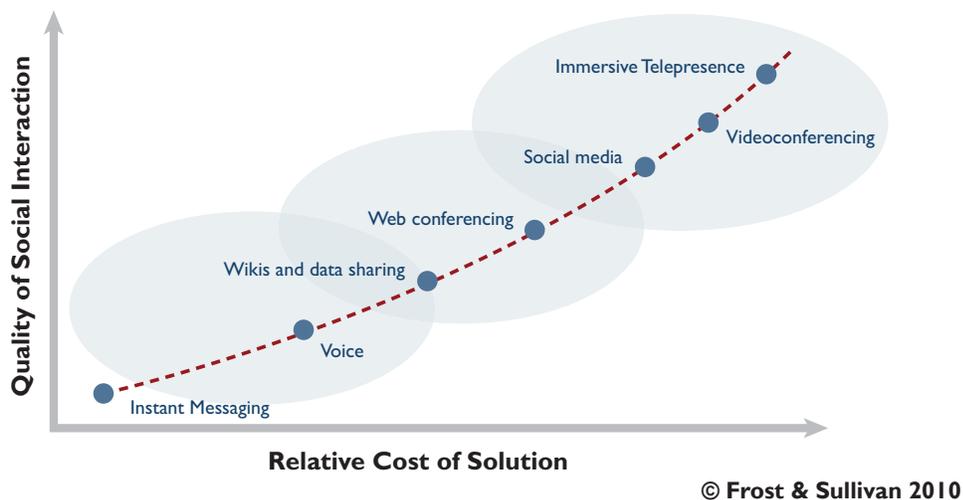
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Good social interaction depends on this form of synchronous communication, and it is the basis of the development of stronger working and social relationships. It is, however, less suitable for discussing complex information, which may take time to fully digest and understand.

Asynchronous communications are far better suited to exchanges involving large amounts of data since they let team members store information in a location where others can easily access it. This gives members time to review the material, but also to incorporate it into new content, which can be shared with the group. Shared workspaces, e-mail, wikis and social media are good examples of asynchronous collaboration.

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Optimum collaboration takes place when both synchronous and asynchronous collaboration tools are used in tandem, each at an appropriate time.

The currently available portfolio of both synchronous and asynchronous collaboration tools is rich, powerful, and highly adaptable. Although "mobility" is not in itself a form of collaboration, the latest advances in technology mean that collaboration is no longer tied to the physical office.

Beginning with laptops and mobile phones, then followed by smartphones and—more recently—tablet computers such as the Apple iPad and Android-based products, mobile platforms are now able to support the complete range of the collaboration modes, including the complex and more demanding forms needed for team collaboration.

The mobile phone has enabled countless travellers to keep in touch with the team, joining conference calls while on the move or at home. Similarly, Web conferencing works seamlessly across desktops, laptops and tablet computers. More recently, developments in videoconferencing and network technologies have extended high-quality visual collaboration to the dispersed and mobile virtual team.

Support for collaboration can now be independent of both device and user's location.

Support for collaboration can now be independent of both device and user's location. Information used from one device can be "synched" to allow access by another device, by the individual or by the team, eliminating multiple versions of a document and ensuring a team member can work equally effectively from a desk PC or a mobile device like a tablet. Further, a user's collaboration session can seamlessly span multiple devices, allowing the user to move freely between these devices as need dictates. For example, a user may chose to start a Web conference meeting on a smartphone while travelling to the office, switch instantly to a desktop PC adding real-time video in the process, and then continue the call by moving on to a tablet, all without breaking the call or losing the vital information being shared.

The following list summarises the main categories of tools.

- **Presence Information**
  Presence information allows users to check the availability of other members of their team and that of members of the wider community of users within an organisation. The "richness" of the presence information available depends on the type of deployment and its configuration, but at a minimum it will show whether another individual is available for a chat or phone call, or is in a meeting or away from his desk.

  More detailed information can be used to decide when to contact another team member and how. For example, someone working on an important sales proposal from his home office might be available via IM, but not on the phone.

- **Chat or Instant Messaging**
  The use of text-based chat, provided by a dedicated instant messaging client or as a function within a unified communications application, offers users a quick and highly effective means of passing information or making a decision—without the time, effort, and formality of a telephone call or e-mail.

Arguably, however, the speed and terseness of instant messaging can create its own problems around tone of voice. This can be especially problematic in a newly formed team, with members from a diverse range of cultures and speaking different languages.

An over-use or reliance on instant messaging at an early stage of team development, when interpersonal relationships are still forming, may retard the process, delaying performance improvements. As with presence, it is essential to know when to use this tool, selecting others that support higher-quality interaction when the occasion demands.

- **Telephony**
Basic telephony offers a virtual team many advantages at all stages of its development. Although many employees routinely replace phone calls with e-mail or IM, voice offers an effective way for members of a team to get to know one another. This starts the development of a social dialogue that can ultimately create stronger bonds and deeper levels of trust than asynchronous or text-only communications can offer.

Leadership can play a strong role in encouraging more voice communications and discouraging chat and e-mail—particularly in the earliest stages of team development.

- **Web and Voice Conferencing**
Conferencing provides a greater degree of collaborative freedom, allowing the entire team to interact as a single entity, with each other and with external parties, thereby speeding up the process of gathering and sharing information.

Voice or telephone conferencing offers the highest degree of flexibility, as participants can be anywhere in the world and still participate. Web conferencing adds a further dimension by allowing the team to share visual information with one another—whether a presentation, a spreadsheet, or a view of any application running on a participant's PC. While not as flexible as voice conferencing, Web conferencing does support participants calling from just about anywhere, providing they have access to a Web browser, whether it is running on a PC, a tablet, or a phone.

Both types of conferencing work best when members of the team have already developed some social connection. At this stage, people are better able to read the tones of the voices of the other participants and are less likely to misunderstand the information they receive, and feel more confident in speaking up to query or challenge a point.

- **Social Media**
If presence information is a first step in developing social interaction among members of a team, social media technologies take this capability to new levels.

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At the most basic level, enterprise-grade social media tools work in a similar way to the more familiar consumer services, such as Facebook and LinkedIn. They help individuals within an organisation create and broaden their networks of both personal and professional connections. Critically, such tools can allow users to build connections with the people possessing the knowledge, skills and experience they need—inside and outside the organisation.

These enterprise-based social connections can offer a major advantage in securing new business and gaining access to the necessary expertise to deliver a project on deadline. Long-term benefits are created as these relationships develop, built on a growing mutual trust and confidence as information and knowledge is shared.

- **Information Search, Access and Sharing**
  It is essential that all types of information—text, graphics, audio and video—can be readily accessed by all team members, whenever it is needed. That will require that it be created, stored, searched, tagged, shared, reviewed, and amended at any time before, during and after the project at hand. This information may come from many sources, both inside and outside the company.

  For example, *wikis* take the form of an internal website, but require no additional tools or specialist expertise to create and maintain. They offer users great flexibility and speed in storing and sharing information in a highly accessible and familiar format.

  Team spaces employ advanced document management and search capabilities to enable ongoing collaboration among team members. Existing documents or links to external resources can be uploaded and shared. Team members can tag the information to assist more accurate searching by other members.

  User profiles can also be stored, tagged and searched, helping speed up the process of identifying and locating people with specific skills or knowledge vital to the completion of a task.

- **Visual Collaboration**
  Until relatively recently, visual collaboration required the use of expensive videoconferencing systems, linked via an equally expensive yet often unreliable network connection. Great strides in both the quality and reliability of videoconferencing products and the network services needed to support them have been matched by falling prices.

  The visual component of collaboration contributes greatly to the fluency of human communications...

  The visual component of collaboration contributes greatly to the fluency of human communications, and thereby to the overall accuracy and clarity of team interactions. Today's visual collaboration solutions are enabling team members who are normally physically separated to conduct high-quality social interactions with ease, thereby adding to the richness of their meetings, with a positive impact on team performance.

  The power of visual collaboration lies not only in being able to read another person's facial expressions and body language, but also in enhancing the audible cues participants receive during a meeting, including intonation and nuance. These factors can be enormously important in building relationships and maximising the cohesion within a team.

- **Immersive Video Collaboration**
  Immersive telepresence is one of the most recent developments in videoconferencing technologies. The design and construction of the immersive meeting-room environment confers on users certain advantages, which improve the overall experience, and hence

outcome, such as apparent eye-to-eye contact, life-size images of participants, and high reliability and consistency through the use of managed network services. Immersive visual collaboration also eliminates a large part of the fatigue that can occur with longer conference calls, which improves strategic communications and allows the technology to truly replace in-person meetings.

- **Unified Collaboration**
  All the collaboration tools described so far can be delivered to users as a single, fully integrated package, either as a premises-based solution comprising hardware and applications, or as a hosted offering, with many of the solution's components residing in the cloud.

  Unified collaboration solutions generally have a single design philosophy, which translates into a common user interface and experience for the various tools and functions that make up the package. This can significantly reduce the learning and adoption curve, ensuring the shortest possible time to productive collaboration.

  Integration of the collaboration tool set also allows users to easily move between different collaboration modes to meet the prevailing situation. For example, being able to switch from an IM discussion to a video call with a single click of the mouse can help team members add immediate clarity to a conversation.

Unified collaboration solutions generally have a single design philosophy...

CHOOSING AND DEPLOYING THE RIGHT TECHNOLOGY FOR YOUR TEAMS

Part of the challenge any company faces in selecting which tools to deploy is in knowing the most appropriate way to use each tool to maximise the benefits it delivers to the virtual team and to the wider business.

Inappropriate use of a collaboration product or service may actually impede rather than enhance a team's progress, and can result in the full benefits of the tool not being realised as quickly as possible.

It is important to know the potential strengths and weaknesses of the various forms of collaboration in different circumstances and situations, and how to get the maximum value from the use of each.

Building the Virtual Team	Challenges	Collaboration Options
The earliest stages—new project, new team members	• No or few existing relationships among members of the team • Lack of familiarity with project objectives • Little planning completed	• Use of **face-to-face** meetings for introductions between members if possible • **Telepresence** and **videoconferencing** will help members of the team get to know one another, start to interact, create mutual trust and build empathy. • **Web conferencing** is an ideal tool for the leader and project stakeholders to use to present information to the team.
Team members begin to understand the project goals, their own roles, and who is doing what in the project.	• Individual team members have expertise and knowledge to contribute, but no established process for doing so. • Members are unaware of each others' abilities, knowledge, and what they bring to the project. What information is known to be available is dispersed. Other information that will be critical to the project has yet to be identified.	• Team leader makes extensive use of **voice** and **videoconferencing** to hold one-to-one and group sessions. • Sharing information using **wikis** and **workspaces** helps the team pool and manage information needed for the project. • As members settle into their own roles, they will start to seek out needed data and expertise using **search** and **social media** tools.
Team members are starting to work toward their individual goals, but the team isn't yet working as a single unit. There are disagreements, misunderstandings and conflicts arising. There are still issues with communications external to the immediate team, with stakeholders and potential suppliers of information and/or products essential to the success of the project.	• Misunderstandings are being created by poor communications and a lack of awareness of issues faced by other team members. Errors and delays can result. • Mistrust can become deep-seated if not tackled early, leading to poor overall performance. • At worst, the team may become dysfunctional, putting the success of the project in jeopardy. • The team must be able to tap into external knowledge and skill sets easily and quickly.	• The team leader and individual members need to "over communicate" to ensure clarity and understanding. **Voice conferencing** and **videoconferencing** should be used frequently with clearly set agendas and agreed-upon outcomes. • **Instant messaging** can allow for fast communication of information, ideas, and decisions among members that now know and trust one another. • **Web conferencing** is an effective tool for communicating information and progress reports to the overall group. • The team's **wikis** and **workspaces** become a repository for all key information and materials being used and produced by the team, speeding time to access it. • **Social media** tools enable the team to locate additional resources beyond its existing members, with search functions locating and filtering information from numerous external sources, as well as quickly identifying specialists whose knowledge may be vital to project success.

Building the Virtual Team	Challenges	Collaboration Options
Team members' time becomes a precious resource, as they are assigned to additional tasks and projects.	• Team members' efforts may become diluted as they struggle to balance the competing claims on their time. • Time is wasted trying to get in touch with people, or taking calls when busy trying to complete tasks.	• **Mobile** collaboration tools help team members share their time across multiple activities by allowing them to access the information and people involved in each project from any device, even when they are on the move or at home. • **Presence** information allows individuals to better control their interactions with others, signalling when they are available for discussions and their preferred mode of communication. • **Shared synchronised information** sources can be accessed securely from anywhere, maximising individual and team productivity.
The team is approaching or at an optimal performance level, characterised by constant, high-quality and accurate collaboration with the team, and between members and external parties. Project goals are being met, and new targets and challenges set.	• Maintaining performance and focus is essential, as there is a risk of effort being re-prioritised toward other activities. • The success factors and best practices of the team will need to be copied and applied elsewhere in the business if the full return on investment in collaboration is to be realised.	• **Social media** can be used by team members to share the experience and knowledge gained in the project with the wider business, ensuring the learning becomes institutionalised. Members' personal profiles will record the work they have done and the specific skills they've developed and used—again becoming immediately accessible to the business as a whole. • **Wikis** and other **shared data sources** and **workspaces** can be archived and reformatted within the company's enterprise content management system to enable a wider audience to search and access the information. • Team members can use **tagging** and other labelling techniques to ensure information can be quickly and accurately located.

THE SIX STEPS TO COLLABORATION SUCCESS

As we have described in this white paper, many companies are already in possession of the answers to many, if not all, of the competitive challenges they face. These answers lie in the expertise and knowledge held by their employees.

Enabling teams to work collaboratively can be an effective way to release these valuable assets back to the company. Here are six key steps for success in your organisation.

• **Review what you do already and how you do it**: Start by reviewing your organisation's existing use of collaborative products and services and consider how effectively they are being deployed and utilised among key business teams, and by the business as a whole. Is the existing usage of collaboration products and services already part of a strategy to improve productivity, or has the investment been part of an upgrade to business communications? How is collaboration integrated into existing business processes and procedures?

…many companies are already in possession of the answers… These answers lie in the expertise and knowledge held by their employees.

- **Put leadership in place**: Is there leadership support for making successful collaborative team-working part of your business? For an organisation to truly gain the full benefits from collaboration tools, ongoing championing of the deployment can be critical, and getting that commitment at the start will make a vital difference.

- **Set clear and realistic targets**: Frequently monitor the team's progress using the available tracking data and by getting regular feedback from team leaders and members. Identify which teams in your organisation can serve as a strong starting point, offering a limited yet controllable environment in which collaboration tools can be trialled and the full benefits to the business monitored and assessed.

- **Support diversity**: Where there is significant diversity in a team, coupled with distance and mobility, collaboration tools are an important substitute for the natural social interactions of co-located team members. And, while the performance of such highly diverse teams will benefit from using collaboration technology, careful implementation and management is critical in achieving a successful outcome.

- **Link to the wider world**: Teams cannot operate in a vacuum. Thought should be given to enabling collaborative access to and interactions with people outside the immediate team structures, as well as information sources in other parts of the business and external to the organisation.

- **Reach out to manufacturers and service providers**: Suppliers will be keen to support you and are an excellent resource, helping in selecting the appropriate products and services, and giving ongoing advice and support in the roll-out of these within your organisation.

CONCLUSIONS

There is nothing preventing any company from taking these first steps on the road to becoming a collaborative culture.

Today's highly volatile and increasingly uncertain business environment demands that organisations maximise the productivity of their most precious resources: the skills and know-how of their people, and the existing expertise and knowledge built up over years.

The collaborative products and services now widely available can enable enterprises to access these critical assets, helping to develop and optimise the performance of the teams working on projects vital to a company's growth and future prosperity.

Leadership from the top and selection of the appropriate collaboration tools are important parts of the implementation process. Getting these right will see an early return on investment and will help produce a sustainable culture of collaboration that will continue to pay dividends for many years to come.

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