



ELECTRONIC INTERACTION

Electronic collaboration has become critical to a company's success. Ron Charity, Joel Jankow and Heinz Thommen, HP, discuss the need to integrate an electronic collaboration strategy within today's pharma business and highlight tools that can be used to realise real business benefits.

Collaboration is more than just working together on shared documents; it is a fundamental aspect of the business that is present throughout the modern pharmaceutical organisation. As companies move towards more distributed operations, and as increasing industry competition and regulatory pressures continue to demand high levels of innovation and productivity, electronic collaboration becomes even more critical to a company's success. For this reason, pharmaceutical companies need to integrate an electronic collaboration strategy within their business.

KEY FACTS

- Methodologies for moving drugs to market are becoming more complex.
- Organisations need to create a collaboration plan for drug discovery.

Author profiles



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Most pharmaceutical organisations today have seen the benefits of their initial collaboration efforts for improving data collection from clinical trials through electronic data capture, or from the way teams contribute to and assemble new drug submissions. However, efficient collaboration in many other aspects in this industry has yet to become second nature.

As the market for new drugs evolves, methodologies for moving them to market are becoming more complex, thus relying more on efficient communication and collaboration strategies between the various parties involved in the whole value chain. With the dawning of personalised medicine and the passing era of blockbuster molecules, pharmaceutical companies are slowly shifting from an industry of products to one of information. In addition, the shift to more integrated global operations, and a distributed organisational structure, make the reliance on effective collaboration and communication tools of paramount importance.

Pharmaceutical business drivers

Pipelines are shrinking, the attrition rate for molecules in development is high and drug markets in major therapeutic areas are being commoditised. Pharmaceutical companies are being forced to develop more truly innovative compounds, faster and at a lower cost if they want to survive.

The issue is how to get sufficient amounts of compounds to ensure at least one will make it to the market. It may seem

contradictory, but a key obsession of the pharmaceutical industry is to then be able to identify as quickly as possible those candidates that are likely to fail, for example, due to toxicity issues, and drop them from their portfolio in order to free up and redirect precious resources to the winning horse. To do this, pharmaceutical companies need to apply creativity to their research processes in order to build a large funnel of potential pharmaceutical projects.

They are also driven to search externally, in smaller companies as well as academia, for new drug candidates to in-license and continue development. Data from this research is often disparate in locations around the globe. Collaboration is essential, as it is being done in conjunction with multiple partners or outsourced to global organisations, which adds to the complexity of efficiently managing the generated data and effectively managing these candidates through the pipeline.

Within the context of product lifecycle management, multiple teams from departments that are different in functionality and may be new to the project need to engage and collaborate to develop, for example, new formulations, new medical devices and new indications, in order to extend the life of the patient and prevent the erosion of sales due to generics.

For these reasons, common collaboration services are needed. Establishing these services will provide pharmaceutical organisations with these direct business benefits:

- improved R&D collaboration between public and private labs and partners
- improved R&D efficiency leveraging collaboration capabilities
- improved lifecycle management of products
- enhanced information dissemination
- improved relations with key stakeholders such as doctors and consumers
- focus on products that have the best chance of getting to market and accelerated time to market.

Pharmaceutical manufacturers and their customers are not the only entities that need to collaborate. Regulatory agencies are tasked with ensuring that products are safe and efficient, and have to do so not just at the time when a dossier for a New Drug Application is presented to them, but also during the entire time that the drug is being commercialised, which is a lengthy, complex and costly process.

The collaboration spectrum

So pharmaceutical organisations need to create a collaboration plan for drug discovery, development and approval with key indicators to enable rapid selection of the most innovative and promising drug candidates.

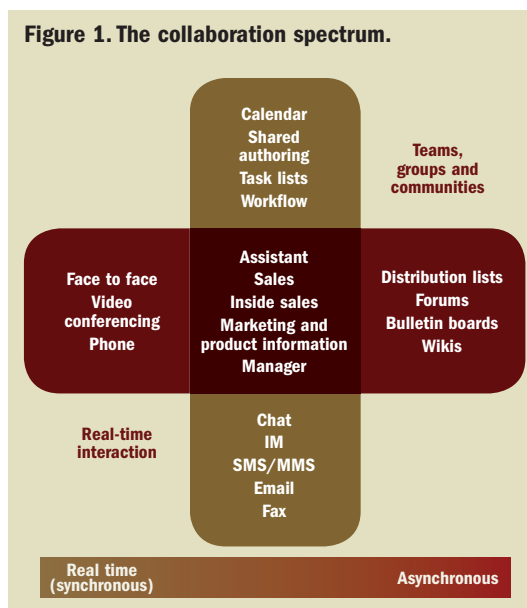
Key to the success of collaboration are people, network, a content strategy for each department because each department's needs' are different, and a corporate information architecture that pulls it all together into a usable and sustainable experience for staff. For example, each department has different job functions, goals and tasks for their functional area, applications and information they require and people they interact with. The end goal is to create the one place for pharmaceutical staff, partners and their customers. Sharing information, streamlining business process, self service and empowering staff with the relevant and timely information in a natural manner without having to even think about it can help provide staff with the leading edge to be successful.

'Companies must create an ecosystem of people and information to reduce costs and speed time to market.'

In addition to the better known collaboration technologies in everyday use such as email, team sites and web conferencing, companies are researching and selectively deploying Web 2.0 within the enterprise. The application of social networking tools allows companies to tap into and leverage the tacit or implicit knowledge contained within the organisation to great benefit. For example, knowledge networks can be created by identifying relationships between individuals and the topics discussed. These networks can then be used to link individuals together, such as scientists working on similar compounds in different parts of the world, outside of formal reporting structures or functional boundaries. Ultimately pharmaceutical companies must strive to create an ecosystem of people and information to reduce cost structures and speed time to market.

HP collaboration framework

HP has developed a collaboration framework to provide a holistic view of collaboration and key subject areas that must be addressed when deploying a collaboration solution. Providing a holistic view, the framework addresses business drivers, technologies,



management of change, content strategies, collaboration as a service offering, user support, office design and security. Figure 2 depicts the framework that consists of:

- business drivers
- external factors
- workplace
- governance
- information architecture
- people
- network
- security and compliance
- help desk and mentoring
- change management.

The framework addresses the many aspects of creating a sustainable and secure environment staff will use daily from anywhere they work.

Collaboration meeting point

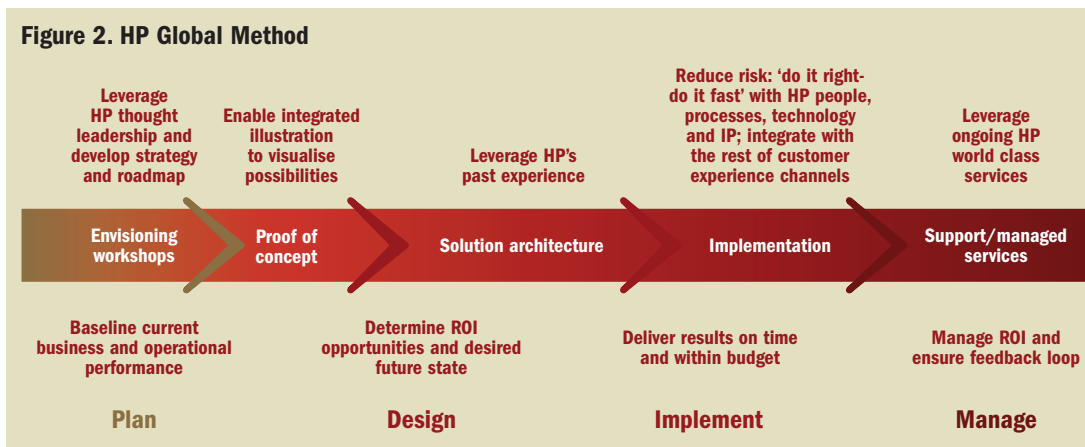
The complexity of deploying a collaboration solution can't be underestimated. Most pharmaceutical companies are global in nature and therefore have a diverse geographical structure resulting in a highly distributed/complex IT infrastructure (note, many are trying to simplify through office consolidation to lower their cost structures). This means that content and associated data is being created and stored in dispersed places (islands of information).

The impact is that there is no central place to go for storing, categorising, retrieving and managing information assets. To compound the dilemma further, few organisations have taken the time to create an information architecture that organises its content and associated work-flow procedures into an efficient organic whole; one is rarely ever provided with an information architecture when consulting with customers. Most organisations don't have the skill sets and therefore just don't understand information architecture-information management as a whole.

HP's approach

HP's recommended approach for working with the business involves two key workstreams:

- Work stream 1 – to understand specific requirements. The focus of the work analyses people's work (goals and tasks), their interaction with other staff and specific tools and content they use. Additionally, HP looks for inefficiencies (time-consuming tasks) and or gaps in their toolsets and information sources. HP then works with IT.



- Work stream 2 – to understand the current environment, address the business toolset and information needs. Once completing these workstreams, HP presents the client with a feasibility study for establishing their collaboration environment. This approach works well since it helps the sponsor raise awareness of the value of new technologies, raise awareness among the business units and apply new technologies and disciplines to the business.

Solution design and implementation leverage HP's Global Method (Figure 2), people and technology to ensure a predictable and timely outcome. Depending on the environment and situation, HP can support the solution and even manage the environment.

An integral part of this new strategy is embracing the internet and intranet as an intricate part of their business (for example, supporting a mobile workforce, virtualising the office, integrating partners, enabling staff to work beyond the corporate walls, leveraging corporate information assets to boost sales and improve customer service) and marketing tactics.

Value provider

HP has the breadth of services, experience and products to deliver a complete solution and is flexible enough to provide engagements to address the specific requirements of its clients. HP continued to further its commitment to collaboration and information management, for example, through the announced purchase of Tower, a provider of EDRM software and EDS.

As a global company, HP has significant experience and resources to facilitate the success of its clients' collaboration and information management programme. Additionally, HP labs continue to develop unique solutions such as ontology-to-RSS feeds software that provides consumers with an aggregate view of the news they need. HP also shares its experiences across different industries to bring experience from other industries to then provide its clients with innovative ideas and ultimately a greater degree of value. **WPF**