Innovation through collaboration

In an industry where time to market, profitability and meeting regulatory requirements is of paramount importance, new ways to improve working methods within life sciences are always being sought. Sean Dudley investigates how Microsoft is helping companies improve enterprise-wide collaboration to boost innovation

The life sciences industry has reached an inflection point. Time to market, regulatory and profitability pressures have never been more intense, and companies need to enable their workers to get the right information and collaborate across the product lifecycle to help improve decision-making and speed innovation.

"There's no doubt that collaboration is a major driver for companies today," says Egbert Schröer, worldwide managing director of process manufacturing and resources at Microsoft. "CIOs and CEOs recognise that the next big mega trend will involve social collaboration, covering factors such as mobility and the data centre."

Andrea McGonigle, managing director of life sciences at Microsoft, describes her vision of collaboration in life sciences as being the ability to communicate from 'anywhere, anytime on any device'.

"Today more than ever, life sciences companies are collaborating with so many stakeholders to help bring drugs to market," says McGonigle. "Many of these stakeholders are no longer within the four walls of the company – they could be a partnering company, an outsourced provider or an external sponsor."

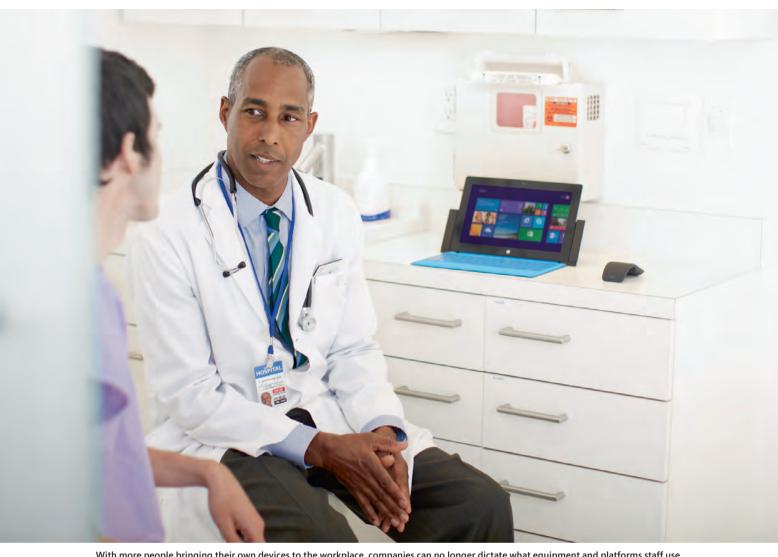
Wherever they are based, these diverse stakeholders need to be able to work together quickly and easily. This requires a communication platform that unites all involved parties and allows them to collaborate in the manner of their choosing.

"The faster a drug gets to market, the more potential revenue there is for the company," says McGonigle. "They do not want to call IT

and wait days or weeks for a tool so that they can begin collaborating. With more people bringing their own devices into the workplace, we can no longer dictate what equipment and platforms they use. It is important that if someone wants to collaborate that they can do it from anywhere in the world, be that at home or in the office, at any time of day or night, and on any device."

Today's workforce is becoming increasingly familiar with new methods of communication, and their demands for the latest tools to help them work even more efficiently will only continue to grow. As a result, Schröer believes that companies must assess their work environment considerably when looking to enhance collaboration.

"Changing demographics have a direct impact on companies," he explains. "As do



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concepts such as bring-your-own-device, which pose a range of challenges, but also a range of possibilities. Workers like to use the devices and platform they feel comfortable with. Even e-mail is beginning to become somewhat outdated, as new methods of communication gather speed. Companies are having to re-evaluate the ways in which they work and the ways in which they communicate. This is a great challenge but it is also a huge opportunity."

While a flexible approach to communication is required, companies cannot afford to be careless when it comes to security and compliance, especially in such a highly regulated industry as life sciences.

"Compliance cannot be compromised or sacrificed in any way; that is not negotiable," says McGonigle. "I do think, however,

people jump to use compliance as a road blocker to innovation. There is a way to do both. A good example of this is the cloud. At Microsoft, we understand the health and life sciences business and we worked with our product teams to ensure our cloud offerings are qualified so that they can be validated. It is important to work with partners and technology that understand compliance and address those needs as part of the offering."

One example of a Microsoft life sciences partner offering compliant solutions in the cloud is NextDocs. Its regulated document management system runs on the Microsoft Azure platform, allowing a company's customers and stakeholders to securely access information from wherever they are. At the same time, the business benefits from a lower total cost of ownership.

Developments around business intelligence and the internet of things are also having a major impact on enterprise collaboration.

"Organisations within the life sciences industry use so many 'things', from information systems to things like machines and pumps," says Schröer. "By aggregating and analysing how these are used through the internet of your things, companies can enhance predictability by ensuring that valuable information is shared with the person that is in the best position to use it, who can then take a proactive approach and significantly improve operations."

Going forward, companies will continue to invest in new collaboration technologies to help advance their workforces and find new ways of harnessing the latest and greatest ideas - inside and outside their organisations.

Feature

Collaboration in life sciences

"Collaboration can be used as part of the innovation process within companies," says Schröer. "Through the sharing of ideas and knowledge management, the best ways to enhance working methods and processes can be identified."

Social computing is just one area that is having a big impact on innovation in the industry, allowing people from all areas of the industry to communicate with each other across their own virtual worlds.

"Social computing is becoming part of the innovation process and is a great way to crowd source ideas," says Schröer. "This is helped by technologies such as the enterprise social networking tool Yammer, which enables users to communicate in a more dynamic fashion within their own team, organisation or across the wider industry. These advances are pushing

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companies to think about how to update and advance their business models."

"I think virtual worlds will continue to make collaboration advances and really enhance the experience at another level," adds McGonigle. "These spaces will be powered by the cloud that will allow people to access them anywhere, anytime, and scale up and down quickly."

One company already capitalising on the possibilities of these virtual world offerings is PPD, a global contract research organisation. Serving clients in the biopharmaceutical industry, the company implemented a customised version of ProtoSphere, called PPD 3D, from Microsoft partner ProtonMedia. The platform is integrated with both Microsoft Lync and SharePoint, giving users access to a series of virtual spaces in which they are able to collaborate through

Interview

Michael Liscovitz, ArborSys Group

ArborSys Group is a business consulting and technology integration services firm that has done extensive work in the life sciences area with Microsoft. The company's managing director Michael Liscovitz spoke to *Prime* about how collaboration has become an increasingly prominent point of focus in the life sciences industry.

How do you think collaboration in the life sciences industry is evolving?

At ArborSys Group, we see that most companies today struggle with their rapidly growing volume of critical corporate knowledge, as well as the emergence of information available from external sources such as social media. A large amount of useful information is trapped in information silos, such as e-mail inboxes. There is also a gap in understanding and knowing where organisational expertise and talent resides in the organisation or tapping into external expertise and information.

There is however an increased dependency on information and knowledge technology for innovation and building value. The enterprise social media market has grown rapidly, and companies are adopting cloud technologies to reduce the costs of maintaining larger and larger sets of data. Cloud technologies also facilitate the use of mobile platforms and tablet devices, which are providing employees with unprecedented access to information.

It is this rapid pace of change, the need to innovate quickly, dispersed and remote workforces, and increased customer demands that makes capturing and using knowledge even more challenging. So it is in these areas that we see the use of emerging collaborative technologies playing a vital role in the success of life sciences organisations as they work to provide more effective therapies and treatments to their patients.

Knowledge management and collaboration are not just technologies. It's not about just storing documents. It is not just having an internal social media site or just using instant messaging. It is about sharing and collaborating in a more seamless manner than we do today.

How do your solutions and your partnership with Microsoft support companies?

At ArborSys Group we have seen Microsoft technologies become more mission-critical in life sciences, as companies are continually faced with the demands of having a relevant 'pipeline' of drugs and therapies, increased regulatory oversight and the challenges brought on by the globalisation of the industry. We see the ability to leverage Microsoft's integrated approach across their product line, especially in collaboration and knowledge and content management, as a strategic advantage for our clients in life sciences.

the use of 3D avatars, helping to improve clinical research associate trainee engagement and providing competitive differentiation through expanded services. Mike Wilkinson, PPD's executive vice president and chief information officer was quoted in a recent press release as saying: "Comprehensive employee learning and development programs allow PPD to deliver value and quality throughout the drug discovery and development continuum. PPD 3D gives clinical research teams a more engaging and productive way to communicate with colleagues and clients around the world."

With all the tools they need at their disposal, life sciences companies are taking impressive steps to improve collaboration and boost innovation across the enterprise, empowering their workers to share new ideas and take their productivity to the next level.



Social computing is having a big impact on the life sciences industry

This value not only lies in the cost of the actual product but with the ease of use in developing and maintaining solutions. In addition, we see Microsoft's 'mobile-first, cloud-first' approach as a new area of value creation for the industry.

We recently partnered with Sanofi, Microsoft and a Microsoft partner named DITA Exchange to develop an industry-leading structured content management solution. The solution leveraged Microsoft's Intelligent Content Framework for regulated industries and SharePoint. It addressed one part of the clinical documentation compendium, the creation of patient narratives, which summarise patient results in a clinical study, and resulted in helping the company save 22,000 hours of work on 4,000 documents.

What do you think the next big development in collaboration will be?
We are moving towards an era of

'enhanced collaboration'. It is one

in which organisations will work and collaborate seamlessly, far greater than they do today. It will be an environment that is process oriented, one that fosters collaboration within and outside the organisation and will be based on distributed interactions requiring advances in the use of workflow, social networks, and information and knowledge management. An organisation able to leverage these advances will gain strategic advantage over their competitors. More importantly, they will have the ability to deliver therapies and treatments in shorter timeframes with better patient experiences and outcomes.

In lockstep, we see moving beyond today's 'cloud-first' mentality to one in which the cloud is woven into the fabric of a company's collaborative business processes. This will lead to new operating models in areas such as R&D, data analytics and supply chain management.



"We are moving towards an era of enhanced collaboration"

Michael Liscovitz