

TALES OF TRANSFORMATION



Digital transformation: The buzzword of the day

Greg Reh, Deloitte Global Life Sciences Sector Leader

Mike Standing, Deloitte Regional Life Sciences and Health Care Leader, Europe, Middle East and Africa

00:04 – 02:03 **Heidi:** Digital transformation might be the buzzword of the day, but for life sciences companies it is becoming a critical imperative to succeed in a changing business environment. New technologies and digital transformation offer biopharmaceutical and medtech companies opportunities across their organizations—from how they conduct research and interact with regulators to how they optimize their finance, supply chains, and manufacturing operations. New digital capabilities can also change the game in how companies engage with their customers, patients, and other stakeholders. However, life sciences companies have not traditionally been early adopters of new technologies. While many are experimenting with digital initiatives, they have been doing just that: experimenting. Companies have yet to make bold moves to take advantage of the new capabilities and benefits that digital offers.

What is holding life sciences companies back? How can they better take advantage of new digital capabilities? And how do they demonstrate impact and ROI from their investments?

This is Tales of Transformation.

In this season, we'll explore digital transformation in life sciences and the challenges and opportunities companies face in moving from *doing digital* to *being digital*. Many of these were highlighted in a Deloitte Life Sciences research paper that was based on Deloitte and *MIT Sloan Management Review's* fourth annual study on digital maturity.

Today, I have Mike Standing and Greg Reh with me to discuss the opportunities and challenges life sciences companies face as they digitally transform themselves. Greg is the global leader of Deloitte's Life Sciences and Health Care practice and Mike Standing is Deloitte's regional life sciences and health care leader for Europe, Middle East, and Africa. Welcome.

02:04 **Greg:** Great to be here.

2:05 **Mike:** Thanks for inviting me.

02:06 – 02:12 **Heidi:** Greg, so why now? Why is digital transformation so important to this sector?

02:12 – 03:10 **Greg:** I think right now the industry is really at an unprecedented position, the result of a confluence of pricing pressures, outcome pressures, the move to restructure assets for optimization purposes, the entire shift towards a more patient-centered operating model, and the game-changing science that underlies a lot of the new and novel therapies that are being launched. So digital transformation really plays a role across all those factors. I think the industry has really recognized the importance of data as the new currency of health care and as a result has started to move from a number of domain-related experiments or pilots or even full-on programs within a domain, to start to look at the enterprise from a data lens to take advantage of a number of the new enablers that are out there, as well as to create some platforms by which they can continue to evolve their operating models. ▶

03:11 - 04:06 **Mike:** I think Greg's absolutely right in terms of this concept of data being the new currency. I think it's becoming clear across the industry that both pharmaceuticals, and health care more broadly, is becoming more and more an information and digital sector from computational biology that's transforming the nature of research and development, all the way through to new platforms that are driving faster and more effective developments and testing of new drugs, right up to the transformation we're seeing in commercial operations where digitally based closed-loop marketing is able to be much more precise about who we need to target with what message to make sure the right drugs go to the right people. And this transformation of data and digital is leading, I think in the long-term, an ability to address the concerns that Greg raised about costs and about efficiency and about the types of return the industry needs to look for in the future.

04:07 - 04:16 **Heidi:** In terms of transformation and taking advantage of this data currency, what do you think has been holding life science companies back from evolving their digital capabilities?

04:17 - 06:56 **Mike:** Well, I think first of all, applied digital is not a straightforward task. I think many industries have looked at the opportunity and then found it often difficult to translate it into practical, new approaches and new ways of running their business. But I think in particular in the pharmaceutical sector, there's been a lack of vision, a lack of an ability to really understand practically how to apply digital. And we certainly saw this in our research we did recently with MIT, where it was recognized that lack of vision was one of the big factors. So what we're seeing is the companies, as they begin to sort of think about the real fundamentals of what they're trying to do, tend to be able to build the types of visions that we need to see in the future. So, for one example, we're seeing with digital marketers, if they go back to the classics of marketing and ask the core questions of who they're trying to talk to, what they're trying to say, and how they're going to say it, if they take that approach and then take a digital view and say how do I do that faster and more precisely and with an ability to learn from my mistakes, then we're seeing the types of vision that we need to see going forward. Our research also tells us another reason we're struggling is—and this is from the industry itself—shortages of leadership and skills. We just don't have enough people in industry on the supply side, that is biostatisticians, digital designers, agile developers who have all the skills required to meet the requirements of what is a highly complex, regulated industry. But there's also evidence we have weak demand skills. IT people are really struggling to think about ways in which we can conceive digital solutions and we see difficulties in the two sides really communicating clearly about what they need and what they want. So this combination of lack of skills and lack of leadership I think is also a significant issue here. And then finally, I think there's the question of funding. So if we have a lack of a vision and we're seeing lack of ability for the various parties in the companies to understand what they want and what's potentially available, this creates a drag in terms of the levels of investment that are necessary to sort of move forward. And that lack of investment means we're not learning as fast as we should and not developing new solutions. So over half the people we interviewed said that that adequate funding was now a major challenge in terms of going forward. So it's a combination of vision and leadership and funding. But in saying that I think there's evidence that those issues are now being addressed and we're starting to see literally in the last 12 months some progress in moving forward and applying digital more successfully.

06:57 - 07:12 **Heidi:** So let's talk about vision. Many companies point to a lack of clear vision as a factor that holds companies back. Can you elaborate on how companies can create vision for their digital transformation and develop a holistic digital strategy?

07:13 - 09:16 **Greg:** I think it's still evolving, at least from what we see in working with our clients. There's no one-size-fits-all and it's a function of the company itself, its overall corporate strategy, where they aspire to go from an overall business standpoint, and an understanding that in translating that into a digital strategy is key. And so it can either be a top-down approach where that overarching corporate strategy then drives everything from governance to how various initiatives are initiated and delivered. But oftentimes it's helpful to do a bottoms-up view, where any number of use cases can be categorized into categories of execution and operational effectiveness or innovation kinds of use cases or engagement use cases, whether that engagement is with patients or customers or employees or other stakeholders. And by doing that, you can very readily start to see the synergy that exists by enabling any one of those and start to categorize those use cases in a manner that ultimately creates a roadmap to a corporate strategy. The third approach we've seen is more of a horizontal and this is typically when the goal is to identify where a particular technology, be it cognitive techniques or blockchain or RPA, can be applied to a process, whether that process is a patient journey, it could be a regulatory pathway, any kind of a process that exists that then allows for a team to evaluate where the enablement components could actually increase cycle time or reach any of the KPIs that might be associated with that process. So generally those three, top-down, bottoms-up, or horizontal approaches, are what we've been seeing in the market.

09:17 – 09:30 **Heidi:** I would imagine one of the most challenging aspects of these kinds of transformation is demonstrating impact. Mike, can you provide examples of what leading companies are doing that truly demonstrate impact? 🗣️

09:31 – 13:51 **Mike:** So our approach is really to break down the question to what should we use as a set of criteria to measure digital, and we've seen three coming forward. The first is execute. Can we actually see measurable improvements in terms of effective and efficiency coming out of digital? The second is engagement. Digital technologies are about creating higher levels of interaction. So are we seeing real engagement interaction between the different parties in the system and can those interactions lead to greater levels of understanding and relationships and loyalty? And then a third criteria we look for and we measure and we see success is in the area of innovation. Can we do things that we have to do in the industry with real innovation and real breakthroughs? So let me give you some examples of where we're seeing that happen. We're working with one major pharma company that's operating a large closed-loop facility, which is delivering a large number of different messages and communications to HCPs, and what we've seen with this new technology in terms of a closed-loop marketing capability is a substantial increase in our ability to develop a new campaign, roll it out, and test it. In fact, we can do that in about half the time it normally takes us to do that in a non-digital world. So clearly an example of improved efficiency, and we can do that with substantially lower costs. So for another client where we've been working, we've developed the ability to manage their global content delivery of marketing material and at the same time reduce overall costs by 20 percent. So we're seeing quite important improvements in terms of efficiency coming from digital, but the critical thing is digital also enables us to engage more effectively and to be able to communicate in a different way to people across the industry. And we're seeing that with the role of social media, being able to understand more precisely what real patients really need and understand from new treatments. We're seeing that in better ways to engage and communicate with HCPs to understand what information they need to make the right diagnosis and the right prescribing decisions. And we're seeing that in communication with payers being able to demonstrate the impact of new treatments in terms of not just improved outcomes, but in terms of also the efficiency with which we can treat patients. So, we're seeing a whole new generation of communications going on and then we really measure that engagement by how frequently we're communicating with people, how often individuals respond to communications, and how frequently they then come back for further information. And of course, in the digital world, we can measure that. So one of the key things is not just that key performance indicators are important but the fact that we can now measure this on a regular basis and almost in a real-time situation, so we can get better at what we do, and use measurements not just to assess performance but to learn. And finally, innovation. Let me give you an example, which we shared in our recent report about a company called Science37. They're a specialized company that manages clinical research. They've been using some new digital technologies really to improve what is the critical part of a trial and that is the onboarding of new patients. With these sorts of technologies, we can do that something between 20 and 30 times faster than we used to be able to and that's a very big cost driver, but it's also a basis of whether the trial is going to run and be effective. But probably even more interesting than that is these new technologies have allowed us to actually broaden the population of people. So typically in a typical trial development process, we see that populations aren't as diverse as we'd like them to be, so minority groups could be represented in a typical trial between 2 and 10 percent. These new technologies allow us to reach out to more people, and in fact, produce a more diverse population, probably between 30 and 40 percent is typical now. So we're seeing those digital technologies and the ability to measure those digital technologies across all three aspects. We can see and measure and create more innovation. We can see and measure and create more engagement, and we can develop and execute more efficiently and more effectively. And one of the characteristics I think is once you get to a digital world, you get to a world that's measured and measured real time and measured in such a way as you can learn and that makes digital really exciting for the industry.

13:52 – 14:36 **Greg:** I would add to that on the other end of the continuum that there are a lot of great examples on the supply chain and manufacturing domain, whether it's the ability to create end-to-end visibility of the entire network, so creating real-time visibility of all the raw material through suppliers, through the end customers. A lot of great examples of where IoT sensors are being utilized in production lines to create an even higher fidelity around proactive maintenance procedures. It's pervasive throughout the whole drug development continuum, from R&D all the way through production. So it's an exciting time to witness all the adoption of these various enablers.

14:37 – 14:43 **Heidi:** Greg mentioned earlier the top-down approach. Mike, do you agree with that approach, especially considering a company's need to demonstrate ROI?

14:44 – 18:03 **Mike:** I would sort of mirror what Greg described is the best combinations are actually a combination of top-down and bottom-up. Let me give you a real example, a use case of this. The most important thing, whether you're top-down or bottom-up, is to start off with a really clear understanding of what the business issue is. In one particular case we were working on a global marketing program and the issue was a shortage of marketing and market access capabilities as a result of the number of launches the company was having to put into the market. It had gone up substantially. So I think the most important thing is don't take a shiny object and try and say how you're going to use this. Think what the real business issue is. Second thing is, once you've established the issue, are there real problems with developing digital content? Are there problems with distributing content? Are there problems with delivering content?

So digital is about understanding and developing content, whether in a manufacturing process or it's in a development process or it's in a commercial process. So you really want to look at this from a process perspective and think where the challenges are. Then I think you have to, and what we've seen is take a top-down and a bottom-up approach. So in a good top-down approach, one of the things we're seeing emerging in the marketplace are launched factories. If we have to do lots of launches, we have to do launches multiple times in a year, let's build an institutional capability to do that and let's use digital technologies and let's combine that into large-scale centers of excellence. So companies are setting up top-down launched factories. But at the same time they're encouraging people within the organization in market access or in manufacturing or in marketing to initiate their own ideas and to test and build the solutions using sprints or agile technologies, and we're seeing that happening. In this particular case, we've been working on sprint teams thinking about how do we use artificial intelligence to build better segmentation? How do we use content management systems to be able to more efficiently develop market access dossiers? Can we use new technologies to simplify and coordinate more effectively all the marketing material we need to make and make sure it's all consistent across all platforms? And it's this combination of top-down and bottom-up, I think, that is the secret because the top-down gives us direction, and the bottom-up gives us momentum. Top-down gives us a real understanding of what we're going to invest in in value and bottom-up means that everything is done is relevant. And it's that combination that's been the secret. And I should say going back to what we've talked about a number of times here is really revolutionary digital companies measure everything all the time. They've recognized at the heart of a digital solution isn't just the answer, isn't just a delivery of it, it's the fact that we can measure and we can learn on a continuous basis. Setting this up is not straightforward. It requires a clear sort of vision statement and commitment of resources from the top of the organization, and it requires a willingness to encourage people to use new approaches bottom-up, and it requires a project management approach. If we don't combine those three things together, what we see happening is lots of fragmented solutions that lack scale and a certain level of frustration that the investment that going into digital isn't living up to the results. But the movement towards a clear vision, which activates and engages the organization, is now becoming the proven model.

18:04 – 18:42 **Greg:** Everything that Mike describes is the key in establishing a governance model that works and clients struggle with that, quite frankly, and struggling to find the right governance model, the right means of creating decision rights, whether it's decision rights on data or applications and thinking through that through some of the mechanisms we just discussed and setting the right kind of model that will allow for the progress of any initiative, be it at the domain level or across the enterprise. It really needs to be thought through initially so that you can set yourself up for success.

18:43 – 19:06 **Heidi:** Greg, on our last season of Tales of Transformation, we discussed Deloitte's vision for 2040 and the future of health, a future defined by more well-being and less care, driven by radically interoperable data and empowered consumers. How does digital transformation help life sciences companies achieve this future?

19:07 – 19:52 **Greg:** It really goes back to everything we just discussed, the vision that we've put forth that we believe will become the dominant components of that future ecosystem that is really more focused on prevention and support versus treatment and delivery of therapies. And again, the common denominator across all of that is the ability to manage and utilize and derive insights from data. There are fundamental building blocks that will have to be put in place, whether that's from a technology standpoint or an operating model. And so digital transformation really becomes a bit of a risk mitigator on one hand and an accelerator of strategies on the other.

19:53 – 20:12 **Heidi:** There is no shortage of opportunities that new technologies and digital capabilities offer life sciences companies. There is a movement for a clear vision for life sciences companies. I want to thank my guests Greg Reh and Mike Standing for joining me today on Tales of Transformation. Thank you.

20:13 - **Greg:** Thank you, Heidi

20:14 - **Mike:** Thank you, Heidi

20:15 – 20:20 **Heidi:** Stay tuned as we continue our series exploring digital transformation in life sciences.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the “Deloitte” name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.

Copyright © 2019 Deloitte Development LLC. All rights reserved.