

# Curing pilotitis in digital marketing among life sciences companies

Received (in revised form): 26th April, 2023



David Davidovic

## DAVID DAVIDOVIC

President, pathForward, USA

David Davidovic has been involved in the commercialisation of products and building global, best-in-class, innovative commercial capabilities in the pharmaceutical and biotechnology industries for 40 years, including more than 24 years at Merck & Co., where he led brands, franchises and multiple marketing operations functions, and eight years at Genentech and Roche, where he was Vice President and Global Head of Commercial Services. Over the past ten years, he has led pathForward, providing strategic, advisory and on-demand expertise to life science organisations of all sizes and stages, as well as start-ups and nonprofits focused on healthcare. David also serves on several company advisory boards and is a member of the board of directors of Clinica Verde, a nonprofit healthcare organisation designing and operating sustainable community health hubs in Latin America. David holds a bachelor of science and a master of business administration degree from McGill University.

pathForward, 280 Spear St., San Francisco, CA 94105, USA

E-mail: davidovic@pathFW.com

## Abstract

*Across the various sectors of the life sciences industry, companies have used a variety of digital tools to support the marketing of their products and services. Many, however, find themselves struggling with 'pilotitis': a persistent condition that prevents them from scaling up their digital marketing efforts by keeping them stuck in small-scale experiments. Pilotitis stems from a lack of clear purpose and direction, fear of failure, lack of digital literacy, low investments in data and measurement and other factors. As this article will show, companies that want to break free from pilotitis must embrace digital as a strategic priority, invest in data and measurement tools, build skilled digital marketing teams, train and educate their leadership, and have the courage to take calculated but substantial risks. By doing so, they can unlock the full potential of digital marketing to reach and engage their audience more effectively and stay ahead of their competition.*

## Keywords

*pilotitis, digital marketing, omni-channel, pharmaceutical, biotechnology, diagnostics, healthcare, digital transformation, change management*

## INTRODUCTION

The life sciences industry comprises various sectors, such as pharmaceuticals, biotechnology, diagnostics and medical devices. Across these different sectors, companies have tried a variety of digital tools to support the marketing of their products and services. The

tools most frequently used include the following:

- *Disease and product websites:* Companies almost always build, deploy and maintain robust websites that provide information about their products and services, as well as the diseases they help

manage. Sometimes they are only informational, but more advanced ones tend to offer greater degrees of functionality, engagement and interactivity.

- *E-mail marketing*: This is a long-established and time-honoured method to reach healthcare professionals and patients. Indeed, among consumers in general, e-mail is still the top digital channel.<sup>1</sup> Sometimes these are mass e-mails directed at specific targeted audiences, but more recently they tend to be personalised with messages customised for each individual based on preferences, profiles, previous engagements across all channels or other patterns.
- *Remote/video engagement or detailing*: This is a capability that allows companies to reach healthcare professionals (HCPs) in a convenient and easily accessible manner, without the need for in-person interaction — and all its inconveniences, costs and risks. Video detailing, as it is often called, is used as a supplement to traditional in-person selling methods, or as a standalone approach.<sup>2</sup>
- *Remote/virtual speaker programmes*: For decades, companies have organised and hosted medical education speaker programmes that, although promotional and highly regulated in nature, still allow an expert, such as a key thought leader or a local specialist in the disease, to educate other HCPs on diseases and products. Remote or virtual programmes are conducted over digital media and feature live or pre-recorded presentations, or a combination of both.
- *Online advertising*: Companies actively conduct online advertising through various platforms like Google, Facebook and specialised medical journals. These are usually in the form of pop-up ads, banners and the like, supported by search engine optimisation techniques that remain relevant and keep evolving.
- *Social media advertising and engagement*: Many companies have a presence on social media platforms like Facebook, Twitter and Instagram. They tend to use these platforms to disseminate information about their product. In some cases, when they are comfortable with monitoring and moderation, they also engage in two-way communications with healthcare professionals and patients, although this latter use is fairly restricted due to regulatory, privacy, liability and other concerns.
- *Social media listening*: Companies actively engage in ‘social listening’ — that is, monitoring and observing without interacting — trends in comments and sentiments about their products, and those of their competitors, as well as about diseases in general
- *Video marketing*: Video is an increasingly popular format used by life sciences companies to educate and engage their audience. Tools and channels for video include YouTube, Instagram and, more recently, TikTok. Some closed channels for videos also include ‘waiting room television’ and in-pharmacy video displays.
- *Streaming television advertising*: With more and more households ‘cutting the cord’ from regular ‘linear’ television providers and moving to streaming services, the opportunity for greater targeting and personalisation has grown exponentially. This can mean higher rates of conversion and retention and also lower costs relative to broad mass-market advertising.
- *Mobile apps*: Mobile apps can be downloaded and utilised by healthcare professionals to access the latest information about a product and apps used or by patients to keep informed of their condition, monitor their health, obtain data from devices, record diaries or track medications and their intake.

- *Electronic health record integration:* HCPs, clinics and hospitals use electronic health record systems to keep and access patient information. Some system providers allow companies to advertise via banner ads or allow messaging that is integrated into the HCP's workflow and customised based on the information available on each patient.<sup>3</sup>

Note that enabling technologies such as customer relationship management or tagging strategies are omitted from this list as these are tools for the backroom rather than the forefront of customer engagement and experience.

Although this is a relatively robust list of tools, the reality is that life sciences companies use them well below their capacity and potential. One reason is the strict regulation around advertising and promotion in these industries, such as the need for extensive disclosures of balanced prescribing information that is often too much or too complex for these platforms to support. Another reason is the nature of health communications and the privacy ethics and liability considerations that come with them. Just one example can illustrate the issue: imagine leaving open the door for public comments on a product's webpage or social media post and ending up with many comments touted as personal experience but unverified, incomplete, biased, agenda-driven, inappropriate or misstated. This can have serious consequences for brands and also for patients.

We cannot leave this overview without mentioning the word 'omni-channel', a word that has consumed the industry, although few agree on exactly what it is. A common thread across definitions and implementations is the coordinated utilisation of a variety of channels, including the ones listed above, to ensure an orchestrated customer engagement and experience.

## THE PURPOSE OF PILOTS

The rationale for doing pilots is perfectly sound as they serve to minimise risks and optimise digital marketing efforts for maximum impact. The idea is to run low-cost, low-risk experiments in order to learn and make decisions as quickly as possible.<sup>4</sup>

Companies conduct pilots to test the viability and effectiveness of a particular strategy and messages with a target audience, or to test the technologies themselves, in a controlled environment. A pilot typically includes a defined set of objectives, target audience, budget and metrics to evaluate success.

During and after the pilot, the results are (or should be) analysed and used to inform decisions on whether to move forward with the full-scale campaign, make modifications or abandon the strategy altogether. The results should also help to inform organisational design, capability, decision-making and process improvement decisions and investments for those initiatives that are deemed valuable enough to continue in the marketing mix.

## ENTER PILOTITIS

The term 'pilotitis' refers to the tendency of companies to focus excessively — and a tendency to get stuck in — pilot studies or small-scale projects, rather than fully embracing, implementing or scaling-up digital marketing strategies and programmes. There has been a lot of fiddling with these over the last 20 or so years, with relatively few initiatives going mainstream or completely replacing traditional and established marketing techniques. It is worth noting that there have been many presentations and articles in industry conferences and publications touting digital marketing innovations as if they have completely penetrated the field and are a major established success; but, in reality,

after lifting the fog of exuberance and vendor claims, few have been truly innovative and become widely used.

During the early days of the COVID-19 pandemic, we did see an accelerated move of digital marketing initiatives from the pilot stage to mainstream, such as the stepped-up use of digital channels for remote engagement with HCPs. However, not every company was ready to make this move at the outset and some had to scramble to acquire and deploy the capability on short order. Also, where initially some observers predicted that digital will be *the* means of future engagement, this has not materialised, and many of these techniques have rolled back to a largely supplemental rather than primary mode for in-person interactions.

## TWENTY REASONS WHY COMPANIES HAVE BEEN STUCK

There are various reasons for this tentative commitment to permanent or fully-deployed innovation in marketing and it is worth unpacking them and understanding the root causes before imagining any solutions. Not all of these factors manifest themselves in every company, but it is worth reviewing them all as they may help readers assess their own situations, identify their main root causes and get on a path to solutions to move their strategies forward in a bigger way. The following list separates these factors into those driven mostly by external conditions versus those that are internally determined (perhaps unsurprisingly, the internal list is significantly longer):

- *External factors:*

1. *Regulatory concerns:* The strict regulatory environment in the life sciences industry fuels a risk-avoidance environment among most companies,

bringing with it a reluctance to try new things or to scale them up more broadly. Even generally used and acceptable practices in other industries draw extreme scrutiny in healthcare. For example, the tracking of pixel codes and analytics was found in one recent case in the USA to be not only an unfair, deceptive and abusive practice but also a serious data breach.<sup>5</sup>

2. *Compliance and regulatory environment:* The life sciences industry is complex and multi-dimensional in terms of its engagement with its customer base, and involves a variety of functions, including medical affairs, commercial and clinical research, among others. The compliance and regulatory environment places limits, real or exaggerated, on the ability of these functions to work together and collaborate for better customer engagement on behalf of the whole company.

3. *Data access and use legal and ethical constraints:* Digital marketing critically depends on data to develop and deliver the right messages to the right audiences at the right time, including much-desired personalisation and relevance. For many reasons, however, access to real-world data and its use by industry<sup>6</sup> is restricted or limited, thus creating a barrier to the successful design and use of these techniques.

- *Internal factors:*

4. *Lack of clear strategy:* Companies struggle to develop clear and comprehensive digital marketing strategies. Often, they implement standalone capabilities that are not linked or integrated to an overall strategy, or worse, are simply implementations of tools that got sold

either because of convincing vendor efforts or because competitors had implemented them or because of last-minute budget capacity. Companies also seem to be stuck in lengthy, over-engineered and never-ending ‘transformations’.

5. *Data quality and privacy concerns:* Companies are often hesitant to collect and use customer data, including patient data, due to fears and concerns regarding privacy and data quality, thus limiting the impact of digital marketing initiatives.<sup>7</sup>
6. *Customer hesitancy or fragmentation:* There tends to be an over-indexing in marketing and sales efforts of customers who prefer to use non-digital channels. Although this is a reality that needs to be considered for expedience, the fast evolution of the field and technology means that such hesitancy is likely short-lived.
7. *Resource constraints:* Digital marketing initiatives require significant investment in technology, human resources and training. Pilots are easy to manage and fund; however, scaling them for full integration is not only costly but also requires a long-term commitment. Furthermore, companies are reluctant to cut off established techniques, creating a double-investment quandary. An example of daunting prospective costs and effort is content monitoring and moderation in social media. It is one thing to monitor occasional pilot posts, but a completely different one to do so at full scale.
8. *Eternal centres of excellence:* Centres of excellence are often essential when it comes to new, complex or cross-functional activities, and digital marketing has certainly benefitted from their establishment. The problem, however, has been that in most companies they get established and never go away or transfer and integrate their knowledge and work into core marketing functions. This ongoing reliance of a separate hub, usually with misaligned incentives, only perpetuates pilot mindsets, investments and initiatives.
9. *Limited in-house expertise:* Career paths in life sciences marketing functions have tended to involve a progression from field sales positions or direct recruitment from business schools. Rarely has a technology or digital marketing background been a requirement. A recent scan of 20 job postings for marketing managers on LinkedIn had only seven mentioning ‘digital’ or ‘interactive’, and all but one of those had it as a ‘preferred’ wish as opposed to a requirement. As a result, life sciences companies simply do not have in-house expertise in this area, making it difficult for them to develop and implement effective end-to-end strategies that do not rely heavily on vendors and agencies.
10. *Vendors and agencies all over the place:* Vendors and agencies have come a long way but remain highly fragmented by channel and are often unable to provide single-point expertise for complete digital marketing strategies. Some new consulting/services firms that are independent of products and solutions have popped up but they are limited in number.
11. *Insufficient leadership support:* Business leaders have had a hard time supporting and funding broad digital activities beyond pilots, largely because they do not understand them,

- having risen through the ranks without building the skills and competencies that come from experience. They also fear stopping doing what they know well — even if it is unproven when it comes to returns.
12. *The ROI conundrum*: The lack of comfort with digital among leaders tends to fuel their demands for demonstrable return on investment (ROI) before moving from pilots to broad implementations. Interestingly, however, the majority of traditional sales and marketing activities have not been consistently associated with positive ROIs or value demonstration, yet they still form the foundation of all strategies and tactics. Regardless, the difficulty in measuring ROI and quantifying the impact of digital marketing efforts is now being addressed thanks to the data-rich environments in which digital marketing operates.<sup>8</sup>
  13. *Not following a 'digital first' approach anywhere*: Until recently, just about every digital marketing activity was a spin-off or add-on to traditional marketing and sales campaigns. This has made it hard to expand digital activities on their own as they have always been wedded to or derived from their traditional counterparts.<sup>9</sup>
  14. *Omni-channel paralysis*: Instead of sticking to simple, coordinated campaigns using multiple channels and media, the industry has got caught in a convoluted maze of definitions, advanced vendor-pushed technologies, the illogical importation of techniques from the unregulated consumer world and more. This frequently results in costly, lengthy and overly-engineered 'transformation' efforts that cause excessive disruption.
  15. *The difficulty of integration across systems*: Integrating digital marketing with core systems, such as CRM, can be challenging, slowing progress and limiting impact. The many obstacles associated with implementing each individual system make the prospect of connecting or integrating them all the more daunting. Another issue arises when one of the systems is replaced and all the links and connections have to be re-established. Previous disasters further compound companies' hesitance to move further towards the digital corner.
  16. *Pursuing 'single-node innovations'*: Good marketing requires the integration and orchestration of the various steps towards a common goal. Unfortunately, many digital programmes have been developed as standalone innovations intended to address one narrow problem or opportunity, but have not been well linked to other activities and programmes. So they stand alone ... making it easier to get shot down and not get out of pilot mode.
  17. *Pilots that never die*: We have seen companies' inability or unwillingness to stop pilots after not obtaining the desired results, losing interest or shifting their focus to other initiatives. Sometimes we see a lack of courage to stop them because of emotional, staffing or financial commitments.
  18. *Analysis paralysis*: Some organisations tend to be uncomfortable operating with ambiguous and limited information, so they tend to over-analyse everything they do or plan to do. This lack of confidence and ability to make decisions in the absence of perfect

data results in them standing still while their competitors move forward.

19. *Organisational structures not designed for digital transformation*: It is difficult to integrate digital marketing with traditional marketing. Companies tend to build satellite or parallel digital marketing functions as they build their capabilities but are then stuck with them and struggle to integrate them with their existing marketing efforts.<sup>10</sup>
20. *Lack of clear ownership*: Companies have been unsure about who within the organisation should be responsible for digital marketing, leading to a lack of accountability and direction. Although the picture today is clearer than it used to be, we still see too often a siloed approach among marketing, medical affairs, marketing or commercial operations, medical operations and IT.

### **LIFE SCIENCES COMPANIES DO NOT STAND ALONE**

The phenomenon of pilotitis is not confined to life sciences companies, they also manifest in other aspects of healthcare and likely elsewhere. ‘Digital medicine technologies offer the potential to transform and revolutionise health care, many are at risk of stalling and remaining in the pilot stage, known as “pilotitis”, thus never reaching true potential’.<sup>11</sup>

Digital medicine and digital health, in general, are the uses of digital technology for the diagnosis and treatment of diseases or the management of medicine. One would think that with the overwhelming amount of information, the number of users (the healthcare community and patients), the huge number of transactions and the growing digital mindset of consumers, this area would be ripe for big and

meaningful disruptions. Yet, the field is mired by many of the same scaling blocks described in this article and, amazingly, by many of the same root causes.

### **THE TRENDS ARE POINTING TO A NEW WORLD**

At some point, the dam has to break, and the clear opportunities and benefits of digital solutions must and do break through the pilot stages and become more mainstream and permanent.

The COVID-19 pandemic has had a significant impact on the pharmaceutical and biotechnology industries, as has been the case with other industries, and this has been true when it comes to digital marketing. As the world shifted to a more digital-first approach, companies had to adapt their marketing strategies quickly to meet the changing needs of their customers and the limited scope for physical interactions. Life sciences companies and agencies scrambled to advance digital strategies that were waiting in the wings or invented entirely new ones in the weeks and months after the pandemic began.<sup>12</sup>

The pandemic has also led to an increase in the use of telemedicine and virtual consultations by patients. This has made it more important than ever for companies to strengthen their digital presence when it comes to patient engagement in parallel to the growth in digital patient engagement happening between patients and providers. Online health information-seeking behaviours exploded and are likely to remain high. As noted in a recent article on Endpoints News:

as consumers move their healthcare to the same convenience models they’ve adopted in daily life for shopping and entertainment, pharma companies

need to rethink how they're reaching patients. Traditional sales and marketing models with a focus on educating doctors who will pass information on to patients isn't going to work if almost half of Americans aren't even showing up to see a doctor.<sup>13</sup>

The American Medical Association recently published a study of key digital trends affecting medicine.<sup>14</sup> Although not squarely in the domain of life sciences, the following trends underscore the increasing importance of moving past the pilot and wait-and-see stages:

- there has been an increase in the number of physicians that see a definite advantage in digital tools;
- adoption of digital tools has grown significantly among all physicians regardless of gender, specialty or age;
- adoption of remote care tools such as tele-visits and remote monitoring have seen the most movement;
- growth in enthusiasm has largely been concentrated in tele-visits; and
- plans for the adoption of most emerging technologies are high but current usage is low.

A recent study by Sermo revealed that 70 per cent of healthcare professionals use social media, both private/professional and public channels, for some clinical and professional purposes.<sup>15</sup> It is worth bearing in mind that 'digital natives', that is, those who have grown up surrounded with technology, whether patients or healthcare providers, are becoming the majority.

All these trends point to a world where digital marketing (ie communications, engagement, provision of services, etc) are no longer optional or something that can be addressed with a wait-and-see attitude. The imperative is clear and urgent.

## OVERCOMING PILOTITIS

The need to jump rather than tiptoe into the digital marketing pool is pressing. But how does a company break through its history of tentative and partially-committed initiatives?

A good starting point is to refer to the above checklist of reasons why companies get stuck and identify the top five or six root causes that have stopped you from progressing and focusing on those. Some companies may find themselves manifesting many more than five or six causes; however, as with all initiatives calling for change management, it is important to focus on just a few, to prevent the exercise becoming another overwhelming and paralysing task, and another impediment to progress. In the words of Charles Darwin, 'it is not the strongest or the most intelligent who will survive but those who can best manage change'.

Other considerations include the following:

- Understand and clearly articulate the 'why', that is, the reason for and the potential impact of digital marketing on the company and its products and services. This may sound trivial, but organisations frequently fail to do this, and instead jump haphazardly into initiatives without trying to express why they are undertaking the projects and understanding what potential benefits they expect. Having such an understanding and knowing what you are trying to achieve, brings about focus and the basis for prioritisation, investment, resources, action and measurement.
- Set clear goals and objectives for each initiative individually as well as for the overall transformation. This helps create a prioritisation filter and a motivational call to action for the teams to follow. An example may be: 'Reduce the reliance,



cost, complexity and risk of in-person interactions while maintaining relevance, quality and impact to support our products'. This may sound lofty, but it is something that can be understood and can act as a pole star to guide a company's efforts.

- Understand the 'soft' aspects of the change. People and organisation are at least as important as the technical aspects involved. Examples of realities to consider include: resistance from managers and individual contributors likely to be affected by the introduction and expansion of digital tools; resistance from executives who are change-averse; temptation to use stale decision-making frameworks as a deliberate or accidental way of complicating and delaying making choices and advances; and exhaustion and frustration from never-ending business transformation projects. In the words of Philip Crosby, 'Slowness to change usually means fear of the new'.
- Recognise the importance of data. Without the right data, personalisation is not possible and it is difficult to assess whether one is having any impact and how to evolve and adapt programmes to remain impactful and relevant.

Pharma companies sit on a wealth of data, usually locked away in different technical and organisational silos. Some are already linking and mining their data sets to improve their pipelines, products, and strategies. But there remains a huge opportunity to create further value from data and analytics using internal and external data sources to drive superior results.<sup>16</sup>

- Having data is vital, but so are robust analytics, measurement and decision-making capabilities and practices. No strategy or initiative should

ever be launched, as a pilot or as a full rollout, without clear analytic and measurement plans. It is remarkable how many projects I have seen, including at large established companies, that have had programmes and data but virtually no analytical capabilities or plans. Essentially, they keep building a bigger and bigger haystack but without any ways of looking for the needle.

- Building a strong digital marketing team that has competencies not only in digital marketing but in life sciences strategy and execution is critical. Better yet, acquire and build these skills *inside* the core marketing teams and start phasing out digital centres of excellence. This sounds too logical, but as discussed earlier, siloed teams with misaligned incentives and different organisational structures will contribute to the lack of broad expansion in this area.
- The need to effectively communicate the value of digital marketing throughout the organisation cannot be over-emphasised, and this must happen simultaneously from the top down and the bottom up. Most current leaders have not learned and implemented these tools and techniques as they have risen through the ranks, so will be less naturally inclined to adopt them, especially if they associate them with their limited, and perhaps unsuccessful, past experience or a current cautious stance, rather than associating them with the future. Increasing understanding of the benefits of investing in a larger-scale digital marketing strategy may be slow and painful, but should be consistent and ongoing, rather than simply defending projects during planning and budgeting season only. Internal executive education and understanding of realistic goals and wins are vital, as are a sense of urgency and the competitive threat of not acting more assertively.

- Start small, but commit to scale up quickly. Pilots can be a useful way to test the effectiveness of a particular digital marketing strategy, but it is important to move beyond the pilot phase and fully implement the strategy if it is successful. This is, of course, easier said than done. But the mindset that every pilot could be expanded to become widely applied should be in place from the beginning. Even in the design of the pilot, companies should ask, ‘if the pilot is successful, would we expand it to full-fledged capability? How do we know it’s successful? What is the minimum standard to call it successful? What would it take to move forward? And how would we do it?’
- The corollary to the last point is to ‘fail fast’. Too many pilots have gone on and on without direction or purpose. Having the courage to stop these projects early and decisively is critical not only for the efficient use of resources but to the integrity of marketing strategies and the success of the overall digital marketing programme.
- Take a ‘digital first’ and perhaps a ‘digital only’ approach with some capabilities and programmes right from the start; not as a pilot but simply go in that direction right from the beginning. For example, take some smaller but important customer segments and use a digital-only strategy with them, and also decouple legacy systems with excessive integration requirements.
- Never stand still, even as you exit from pilot-oriented mindsets. The field is moving rapidly, and likely faster than your ability to absorb tools, techniques and innovations. Customer needs, attitudes, experiences and expectations are constantly evolving. The need to be constantly researching, learning, testing and exploring never goes away.
- Privacy and information security have taken centre stage in the last few years and the risks associated with them are increasing every day. Any company contemplating any kind of expansion of their digital marketing programmes must ensure their capabilities to protect information and privacy are well established and tested before the launch of any programmes. An incident in this area can kill not only an individual programme but also trust and confidence in all future ones. Make sure you have the support, partnership and participation of your legal and compliance teams, right from the start.
- As the company-sanctioned and informal or casual use of social media grows, the risks increase dramatically. Employees and contractors may feel enthusiastic about the news about a company’s product and ‘like’, comment on or share it. These can create significant risks. Companies should develop and establish clear guidelines for the use of social media by employees and contractors — and even vendors such as agencies and consultants — to make sure they understand what is and is not permitted.
- Likewise, with the increase in the breadth of communications using digital channels, there are many opportunities for patients, caregivers and others to share their experiences with the products they take or services they obtain. Life sciences companies are under an obligation — both ethical and regulatory — to act on any reports they hear about adverse events, product quality concerns and the like. Companies should have in place policies, procedures, training and capabilities to act on those reports by following up, investigating them, establishing causality and addressing them appropriately. Simply ignoring them is not an option.
- Major companies can seldom count on a single agency to manage all of their marketing programmes and tactics, so

will engage a variety of agencies, vendors and suppliers. Coordinating all these players may be difficult but it is also essential. If any of these parties are reluctant to or incapable of collaborating with others agencies and vendors — and we have seen cases — then you should reconsider their engagement.

- Likewise, multiple functions in a company may be communicating externally about science, disease and products. Corporate Communications, Research & Development and Marketing may all have communications efforts that use digital channels. Are they coordinated, consistent and efficient?

## THE BOTTOM LINE

Many companies struggle with ‘pilotitis’: a persistent condition that prevents them from scaling up their digital marketing efforts by keeping them stuck in small-scale experiments. Pilotitis stems from a lack of clear purpose and direction, fear of failure, lack of digital literacy, low investments in data and measurement and other factors.

To break free from pilotitis, companies need to embrace digital as a strategic priority, invest in data and measurement tools, build skilled digital marketing teams, train and educate their leadership and have the courage to take substantial but calculated risks. By doing so, they can unlock the full potential of digital marketing to reach and engage their audience more effectively and stay ahead of their competition.

## References

- (1) Marigold, (2023), ‘Global and US Consumer Trends Index 2023’, available at: <https://meetmarigold.com/consumer-trends-index/> (accessed 27th March, 2023).
- (2) Stevens, A., (2023), ‘Do you hear me? When HCPs want their opinions heard’, available at: <https://www.pm360online.com/do-you-hear-me-when-hcps-want-their-opinions-heard/> (accessed 27th March, 2023).
- (3) Doerfler, K. M., Miles, T., Tappen, K. and Piccora, C., (2022), ‘Innovation in electronic health & medical records’, available at: <https://cmimediagroup.com/resources/innovation-in-electronic-health-medical-records/> (accessed 27th March, 2023).
- (4) Oleksiw, J., (2021), ‘How Eli Lilly’s digital transformation led to a customer-first pandemic response’, available at: <https://www.thinkwithgoogle.com/future-of-marketing/digital-transformation/healthcare-digital-marketing-transformation/> (accessed 27th March, 2023).
- (5) US Federal Trade Commission, (2023), ‘FTC enforcement action to bar GoodRx from sharing consumers’ sensitive health info for advertising’, available at: <https://www.ftc.gov/news-events/news/press-releases/2023/02/ftc-enforcement-action-bar-goodrx-sharing-consumers-sensitive-health-info-advertising> (accessed 27th March, 2023).
- (6) Skipper, J., (2023), ‘FDA guidances offer patient advocacy organizations opportunity to improve outcomes’, available at: <https://www.iqvia.com/locations/united-states/blogs/2023/01/fda-guidances-offer-patient-advocacy-organizations-opportunity-to-improve-outcomes> (accessed 27th March, 2023).
- (7) Pifer, R., (2023), ‘FTC orders GoodRx to stop sharing health data with advertisers, issues \$1.5M fine’, available at: <https://www.healthcarediver.com/news/ftc-orders-goodrx-advertisers-stop-sharing-health-data/641671/> (accessed 27th March, 2023).
- (8) Robinson, R., (2011), ‘Multichannel measurement: It’s not all about ROI’, available at: <https://www.pharmavoice.com/news/2012-01-4/616006/> (accessed 27th March, 2023).
- (9) Bughin, J. and Tanguy, C., (2019), ‘3 Digital strategies for companies that have fallen behind’, *Harvard Business Review*, February, available at: <https://hbr.org/2019/02/3-digital-strategies-for-companies-that-have-fallen-behind> (accessed 27th March, 2023).
- (10) Hawthorne, E. N., (2023), ‘4 Reasons pharma’s organizational structures are not built for digital transformation’, available at: <https://www.pm360online.com/4-reasons-pharmas-organizational-structures-are-not-built-for-digital-transformation/>
- (11) Egermark, M., Blasiak, A. Remus, A., Sapanel, Y. and Ho, D., (2022), ‘Overcoming pilotitis in digital medicine at the intersection of data, clinical evidence, and adoption’, *Advanced Intelligent Systems*, DOI: 10.1002/aisy.202200056.
- (12) Snyder Bulik, B., (2020), ‘Pharma marketing’s digital reality finally took hold — and there’s no going back’, available at: <https://www.fiercepharma.com/marketing/pharma-marketing-digital-reality-finally-takes-hold-and-there-s-no-going-back> (accessed 27th March, 2023).

- (13) Snyder Bulik, B., (2023), 'Rise in consumer convenience disrupts traditional pharma-to-physician marketing, ZS research finds', available at: <https://endpts.com/rise-in-consumer-convenience-disrupts-traditional-pharma-to-physician-marketing-zs-research-finds/> (accessed 27th March, 2023).
- (14) American Medical Association, (2022), 'AMA digital health care 2022 study American Medical Association findings', available at: <https://www.ama-assn.org/about/research/ama-digital-health-care-2022-study-findings> (accessed 27th March, 2023).
- (15) Sermo, (2023), 'Social channels gain credibility with healthcare practitioners', available at: <https://www.sermo.com/wp-content/uploads/2023/02/Social-Channels-Gain-Credibility-with-Healthcare-Practitioners.pdf> (accessed 27th March, 2023).
- (16) Champagne, D., Hung, A. and Leclerc, O., (2015), 'The road to digital success in pharma', available at: <https://www.mckinsey.com/industries/life-sciences/our-insights/the-road-to-digital-success-in-pharma> (accessed 27th March, 2023).