Opportunities for Action in Health Care

Big Pharma Can Still Find Big Value in E-Health

THE BOSTON CONSULTING GROUP
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Almost all pharmaceutical companies have moved online, but the big gains they anticipated have largely failed to materialize. Now that the early euphoria is gone, many executives believe that Internet-based technologies can generate only incremental value.

But although e-health is not a panacea, neither is it a pill without a punch: it can still have a profound impact on the drug industry’s value chain. Pharmaceutical companies have taken a piecemeal approach, however, applying the new technologies only to isolated portions of their business and in narrow ways. Some companies have merely added a few disease portals or layered a Web interface over existing activities while continuing to embrace a conventional marketing mix. These players are failing to exploit the true opportunity of e-health: the strategic use of technology to transform internal processes in order to gain competitive advantage—an approach known as e-enablement.

To seize this opportunity, pharmaceutical companies should explore broad areas critical to their business, such as the largely uncharted territory of e-enabled drug discovery. They should use e-development to boost strategic capabilities rather than as a mere technology platform. They should also take steps to integrate online detailing and marketing more closely with the existing sales force, creating a seamless system of customer relationship management. When used strategically, Internet-based technologies can help companies capture the full potential of the business and gain a time-based competitive edge.
Furthermore, the ongoing dot-com shakeout makes this a compelling time for drug companies to redouble their online efforts. After all, a sea of newspaper ink has dismissed e-health as a start-up strategy but not as a strategic lever for the major, traditional pharmaceutical companies, known collectively as “big pharma.” In that light, the shakeout is actually good news for pharmaceutical companies. They can now find e-health technologies and alliances at bargain-basement prices, and start-ups are eager to negotiate partnerships or even mergers.

Of course, the players that produce blockbuster drugs will continue to win the game. But companies could use Internet-based technologies to change the playing field dramatically. Ultimately, those that invest in e-enabling discovery, development, and marketing and sales might identify blockbusters faster, develop them more quickly, and bring them to market in a more savvy fashion.

But the value of the Internet won’t accrue automatically to incumbents. In fact, if pharmaceutical companies don’t act now to shape the competitive landscape, other players such as biotech and genomics companies might do it for them.

**In Search of Value**

Incremental changes will not reshape the landscape. But profound changes promise to transform the competitive field by ending the tradeoff between richness and reach that has long constrained the industry’s players. This tradeoff has traditionally forced pharmaceutical companies either to pare down detailed information for mass audiences or to settle for reaching a smaller universe with richer communication. As
Internet-based technologies become increasingly sophisticated and gain acceptance among a growing number of vendors, physicians, and patients, the costs and barriers of achieving one-to-many and many-to-many communications become much lower. As a result, pharmaceutical companies can communicate with more of the parties in discovery, development, and marketing and sales with greater frequency and customization.

**Discovery.** Internet-based technologies offer the greatest value for pharmaceutical companies when they are paired with the scientific advances already revolutionizing drug discovery. Genomics, bioinformatics, and advances in drug discovery technologies unleash the true power of innovation by exponentially increasing the number of new drug targets and chemical compounds as well as accelerating the speed with which these are matched. But the gold rush is overwhelming. The new technologies can provide the tools to harness and navigate the flood of data, identify promising prospects for targets and compounds, and assess which are most likely to produce results.

DoubleTwist, for example, touts itself as a portal to genomic information and bioinformatics analysis. Its software interface allows scientists to apply automated algorithms to public, proprietary, and third-party databases so that they can access genetic information and perform analyses online. Scientists researching a genetic sequence can run online searches to locate similar sequences, identify associations with protein families, and determine protein interactions—details that suggest whether the genetic sequence is a likely drug target. After researchers conduct an initial analysis, DoubleTwist can automatically monitor further developments, e-mailing updates when related discoveries are unveiled.
Celera and CuraGen offer similar access, delivering complex analyses that scientists might not otherwise be able to perform. The technology offers these advantages at low cost and at an accelerated pace, which could ultimately allow big pharma to explore many more potential targets in much richer detail.

**Development.** Unlike discovery, development is already deemed a promising area for e-enablement. But most companies have concentrated solely on choosing a technology platform for trial management, such as that offered by Phase Forward in the United States or by Quintiles, a contract research organization that operates worldwide. Instead, pharmaceutical companies should be exploring how the technology can enhance their trial recruiting and data management capabilities—and even their relationships with physicians and patients.

Of course, online enrollment, communication, and monitoring will enhance trial speed and accuracy. In the short term, these efficiencies could translate into major cycle-time advantages for early movers, particularly for those that use the technology to achieve real-time syntheses of results. In this scenario, even before a trial is complete, online access to data could help clinical experts identify a subset of participants requiring additional focus, such as men over the age of 60 or the most seriously afflicted.

Yet the true quantum leap that is promised by e-development may be the ability to parlay online connections with trial participants and investigators into closer relationships with target customers. In particular, e-enabled relationships with limited populations, such as oncology patients and specialists, could allow strategic and proprietary access to potential trial par-
Participants and physicians. And even among those seeking treatment for common conditions, tight online links could bolster the loyalty of doctors and patients to a company or brand. Frequent online communication could ultimately accelerate drug launches if companies use these relationships to create a seamless transition from prelaunch trials to postlaunch sales. Particularly attractive is the possibility that close online relationships could preempt competing trials among target groups, thereby locking out the competition in a market niche, product class, or even therapeutic area. “Owning” customers in this way could present an unparalleled competitive advantage.

Marketing and Sales. At the far end of the value chain, where even tiny gains can boost revenue growth substantially, pharmaceutical companies have wisely made online efforts in marketing and sales. Most companies, however, have implemented such online activities outside the existing marketing and sales organization, forgoing the advantage gained when electronic marketing and sales complement existing channels. By better managing the complexity across all channels, pharmaceutical companies could increase their contact with physicians and customize marketing and sales to develop more robust relationships—and the potential for increased revenues.

Much effort has already focused on online detailing, which allows companies to share medical information and stay in touch with doctors between visits with sales reps. Online detailing could let companies not only answer queries from physicians in real time and provide drug information on demand but also gather data on doctors’ behaviors and concerns. The sales force could use such information to segment physicians and customize messages during the reps’ visits.
Finally, online detailing could expand the reach of current marketing by giving companies the ability to contact remote physicians electronically and promote lower-margin drugs economically.

As wireless m-commerce emerges, online prescribing through hand-held devices may present opportunities for the drug industry to influence medical decisions when they are made: during consultations with patients about symptoms, diagnoses, and treatments. Ideally, services such as ePhysician and iScribe would allow physicians to check medical records, drug interactions, and formularies at the moment they write prescriptions. Big pharma could partner with these service providers to position their drugs prominently or to distinguish their drugs’ strengths at the point of prescription. Furthermore, by linking online detailing and prescribing tools, the sales force could monitor prescribing patterns. When fully integrated with marketing and sales functions, online tools (including electronic communication during development) could serve as a comprehensive system for customer relationship management.

Capturing Value

When it comes to capturing value through Internet-based technologies, pharmaceutical companies can neither do it all on their own nor relinquish their core competitive assets to dot-coms. They will need to decide where they are best positioned, where they should find partners, and where they should cede the space to others. As companies formulate their strategy, they should take the following steps:

Leverage their favorable position. The technology platforms that appear radical today will become com-
modities in the future. Thus, the real value lies in the interplay between the technologies and big pharma’s existing assets: strong relationships with physicians, efficiencies and expertise in discovery, and scale in development and marketing. As a result, pharmaceutical companies enjoy a much stronger position than the initial threat of the dot-coms seemed to predict. Given that strength, they will want to negotiate aggressively with technology players, often collaborating with them on joint ventures rather than contracting for high-priced services.

**Challenge conventional wisdom.** Pharmaceutical companies have been scrambling to reach the untapped consumer market with online drug marketing. Because patients far outnumber physicians, they appear to be the more attractive target. However, as two recent reports by The Boston Consulting Group indicate, physicians still wield tremendous influence over prescription decisions. And although many doctors may not surf the Web, wireless technologies may ultimately engage them in greater numbers.

Of course, companies may want to complement their communication with physicians by reaching out to patients as well. But when they do so, they should resist the temptation to create “drugname.com” Web sites in the belief that patients will flock to them. BCG research has demonstrated that patients are not interested in learning about the benefits of a single drug presented in isolation. Rather, they prefer access to a broad range of services online as well as a spectrum of information on all conditions and therapies associated with a disease.

Still, many of today’s broad patient-focused offerings will prove unsound. Even if general health portals such as drkoop.com can steady themselves, they will be increasingly squeezed between popular portals such as America Online and disease-specific portals that home in on self-selecting audiences. Yet health portals that become too focused—such as a site for a narrow geographic niche of cancer patients—may also prove economically unsustainable.

**Combat threats that may emerge along with opportunities.** To be sure, online prescribing gives pharmaceutical companies heightened access to the point of prescription and with it the potential for increased influence. But the same technology will also strengthen physicians’ links to formularies and thus increase the influence of insurers. Therefore, pharmaceutical companies must consider how to position themselves so that they minimize any negative effects of online prescribing.

The most obvious response to this threat is negotiating an enhanced position on formularies: a pharmaceutical company could seek to have its drug listed as the first or only product in a category of covered treatments. Other potential moves include forming partnerships with online prescribing services to help shape the online interface with physicians. Pharmaceutical companies could then use their influence to focus the services on less threatening activities, such as identifying drug interactions, facilitating fulfillment, and enabling formulary overrides. In addition, companies could seek proprietary access to data generated by online prescribing so that they could understand prescribing patterns more quickly and thoroughly, and thereby gain a marketing and sales advantage. Finally, they could seek to use online prescribing services as an additional medium for reaching physicians with targeted messages and services.
Back on the Agenda

Last year, e-health burst onto the CEO’s agenda with a bang. This year, many pharmaceutical companies are already indicating that e-health has fizzled or, in some cases, fallen off the agenda. But CEOs shouldn’t delegate e-enablement initiatives to the IT department just yet, unless they are willing to forgo considerable competitive advantage.

Instead, CEOs should reenergize e-enablement efforts by engaging the heads of discovery, development, and marketing and sales in conversations about the true potential of e-health for critical areas of the company. These discussions shouldn’t get bogged down in technical details. And the managers shouldn’t simply share a few ideas about how an intranet site could help the toxicology department, say, manage information better across trials or products. Rather, they should envision how to transform the way the company conducts research, develops drugs, and interacts with patients and physicians. Then they should strategically integrate Internet-based technologies with the company’s current strengths. Only in that way can they begin to meet the needs of the customers of tomorrow.

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