

The Road to Digital Success in Pharma

(Source: edited excerpts from an article prepared by David Champagne, Amy Hung, and Olivier Leclerc and published by McKinsey and Company)

The authors preface their recommendations by stating that “pharmaceutical companies can play a central role in the digital revolution of healthcare. But capturing this opportunity requires identifying the right initiatives.”

Pharmaceutical companies, faced with changes in digital technology such as mobile communications, the cloud, advanced analytics, and the Internet of Things that are transforming the healthcare industry, are well aware of the disruptive potential of this change. Accordingly they are experimenting with a wide range of digital initiatives. They are still unclear, however, what digital success will look like five years from now. Moreover, the authors of the article believe disruptive trends indicate where digital technology will drive the most value in the pharmaceutical industry, and that should guide companies as they build a strategy for digital success.

Trends reshaping healthcare outcomes-based care is moving to center stage with payors and governments having an ever sharper focus on managing costs while delivering improved patient outcomes, putting an even greater onus on pharma companies to demonstrate the value of their drugs in the real world—not just in randomized controlled trials—if they are to retain market access and premium pricing. In this environment, digitally enabled “beyond the pill” solutions, which include not just drugs but also sensors to collect and analyze data to monitor a patient’s condition between visits to healthcare providers, are becoming critical to serving both parties’ needs. These solutions help drive the adherence to treatment and outcomes that payors and governments seek, and they generate the data that pharma companies need to demonstrate their drugs’ superior efficacy.

As part of current trends, patients are becoming more engaged in a digital age resulting in patients being much less dependent on their doctors for advice, and are increasingly able and willing to take greater control of their own health. In one survey, more than 85 percent of patients said they were confident in their ability to take responsibility for their health and knew how to access online resources to help them do so. In addition, patients are becoming keener to evaluate different healthcare products and services given as they bear a growing proportion of the costs. In a digital world, the ability to engage with patients as they make such evaluations could be key to the success of a pharma company’s commercial model.

New competitors: technology companies are moving into the healthcare space such as Apple, IBM, and Qualcomm Technologies. They are able to engage with patients through apps, health and fitness devices, and online communities, for example. And they are able to collect petabytes of data from these and other sources, such as electronic medical records and insurance claims, capturing valuable insights. For example, the IBM Watson Health platform—recently at the center of a partnership with Apple and its HealthKit health-sensor data platform—is using advanced analytics and

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Sales Dipped 2.3% for Japan’s Pharmaceutical Wholesale Industry in FY 2014

(Source: Pharma Japan)

Member companies of the Federation of Japan Pharmaceutical Wholesalers Association (JPWA) saw their sales fall 2.28% in FY2014 (ended March 31, 2015), the first decline since 1997 when the 3% sales tax rate was raised to 5%, according to preliminary survey data released by the JPWA on August 6.

The JPWA conducted a survey on the latest financial results of 79 companies in April, with 59 provided responses. It is the second time wholesalers’ sales have decreased since the survey started in FY1975. According to the survey, the total sales of the 59 wholesalers came to 9,481,943 million yen (US\$79.2 billion), while their ethical drug sales stood at 8,209,262 million yen (US\$68.6 billion).

Kiharu Takahashi, chair of the JPWA’s Business Managerial Committee and financial director of Vital-Net, blamed the sales dip on a pullback in demand following the consumption tax hike last April as well as on the market’s shift from long-listed products to low-margin generics and products granted the pricing premium that maintains the NHI prices of on-patent medicines.

The gross margin inched down by 0.10 point from the previous year to 6.70% after uptrends in recent years, as did the operating margin by 0.21 point to stand at 0.67%. Selling, general and administrative (SG&A) outlays fell 0.38%, but lower sales sent the SG&A expense rate 0.11 point higher to 6.03%.

The number of employees increased 0.78% as companies built new logistics centers and extended employment for retired workers. On the other hand, personnel costs slipped 1.54% due partly to bonus cuts.

In reference to the impact of Medical Fee Cut Rules, JPWA President Ken Suzuki (who is also an IFPW Director) stated that for the wholesaling industry as a whole, there was an impact from price declines, which were caused as result of a medical fee cut rule for healthcare providers, which rolled out last April with the aim of speeding up delivery price negotiations.

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♦ A budget examiner from Japan’s **Ministry of Finance** (MOF) believes it will be necessary to sharply reduce the reimbursement prices of generics, both first generics and those already on the market, in next year’s drug pricing reform but did not share thoughts on the specific ways to do so or indicate how much prices might be lowered. Currently, first generics are priced at 60% of their original brand-name drugs (50% for oral generics when more than 10 receive listing). For listed generics, a three price-bracket grouping rule was introduced in the previous pricing reform in April 2014, under which listed generics with the same active pharmaceutical ingredients, formulations, and specifications are sorted into 3 price bands (based on market

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natural-language-processing capabilities to deliver clinical decision support. Therefore, the authors suggest that Pharma companies will need to decide soon how to position themselves to compete or collaborate with these new players, or build complementary capabilities.

Historically, pharma companies have controlled both the generation and dissemination of information about their products. Digital technologies have weakened that control, opening an array of new, independent information channels. There are online communities for sharing and discussing patients' experiences, apps and sensors to monitor the impact of therapy on a patient's daily life, and advanced data aggregation and analysis to link disparate, complex data sets and generate new insights into drug safety and efficacy. In response, pharma companies will have to build the capabilities to anticipate or react rapidly to these new sources of evidence, and remain the main source of authority on the performance of their products. To thrive in a digital world, pharma companies will need to deploy next-generation technologies to streamline their business processes. They need to achieve near real-time transparency of their clinical-trials portfolio in R&D, for example, and frictionless sales and operations planning in the supply chain, as well as meet new expectations in efficiency and agility from customers, employees, patients, and suppliers.

Against this backdrop, the authors believe there are four main areas where digital developments will drive value for pharma companies, building on what they see as the key components of digital success: (1) an ability to deliver more personalized patient care; (2) engage more fully with physicians and patients; (3) use data to drive superior insight and decision making; and, (4) transform business processes to provide real-time responsiveness.

Companies do not have to become leaders in all four areas across the enterprise, suggest the authors, some will deliver more value than others in relation to any given disease, depending on market dynamics and their portfolio. But to decide where to concentrate their efforts, companies need to develop a point of view on each area's potential to transform their commercial and innovation models. To help in these decisions, the authors outlined how they believe successful pharma companies will operate in each area in the near future.

Personalized care: Sensors and digital services for tailored, 24/7 treatment. The ability to personalize interactions with stakeholders is a key value driver from digital technology in any industry. In pharma, this value will be realized in large part through the use of sensors and digital services to provide tailored care around the clock. Within five to seven years, a significant proportion of the pharmaceutical portfolio will create value through more than just drugs. Many drugs will be part of a digital ecosystem that constantly monitors a patient's condition and provides feedback to the patient and other stakeholders. This ecosystem will help improve health outcomes by tailoring therapy to a patient's clinical and lifestyle needs and enable remote monitoring by health professionals of a patient's condition and adherence to treatment. Such digitally enabled approaches to patient care are likely to improve outcomes to the extent that they could become a condition of reimbursement, particularly for expensive specialty drugs. Several companies already offer integrated products and services. Medication itself will of course still be important. But it will be more personalized,

targeting the needs of each patient with greater precision than before.

Fuller engagement: Omnichannel conversations with physicians and patients. Digital-engagement technologies open up a whole new world for marketing, the exchange of information, and recruitment for trials. Patients are already starting to use patient portals for their medical records and to communicate with their physicians, and they use apps to fill scripts and online patient communities to speak to other patients with the same disease. Anytime-anywhere virtual care will become increasingly commonplace. Specialist virtual-care apps already exist. Pharma will have to build advanced digital marketing and engagement

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The Convergence of Science, Medicine and Beauty

(Source: An executive summary from a report prepared by Deborah Weinswig of the Fung Business Intelligence Centre. Ms. Weinswig is the Executive Director-Head of Global Retail & Technology)

"The lines between science, medicine and beauty are blurring. Consumers are increasingly seeking cosmetic products with higher efficacy, and cosmetics containing pharmaceutical-inspired ingredients are gaining popularity, as they are perceived to offer better results by delivering nutrients that are necessary for healthy skin.

"The global market for cosmetic products offering drug-like benefits is estimated by market research firm RNCOS at US\$35 billion in 2013 and projected to grow at a compound annual growth rate (CAGR) of around 7% from 2013 through 2018, making it one of the fastest-growing segments in the personal care industry. The major driving forces behind this growth are the aging population in developed countries and continuous innovation by beauty brands.

"Clinically inspired ingredients such as antioxidants, retinoids, peptides, depigmentation agents and growth factors are claimed to address a variety of skin conditions-from dryness and dehydration to unwanted pigmentation to dullness to the effects of aging. They are thus more easily marketed to consumers, and cosmetic makers can demand premium prices for beauty products containing these advanced ingredients. In response to this trend, beauty companies are making huge investments in biotechnology in order to stay ahead of the game.

"The adoption of pharmaceutical-style benefits is expanding into other beauty categories, too, such as haircare and fragrance. Haircare brands are also making use of clinically inspired ingredients to offer solutions for hair loss, thinning hair, and damage caused by styling and pollution. Meanwhile, there has been a breakthrough in fragrance: scientists have developed a perfume delivery system that is effective even when the wearer perspires. In addition, thanks to advances in technology, cosmetics makers are now able to offer customized products that are based on DNA testing. Beauty brands are also applying advanced stem cell technologies in the development of antiaging cosmeceuticals. Although the true efficacy of these new products remains to be seen, demand for innovative products continues to grow, as consumers are more informed and more scientifically literate than they were a few decades ago."

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capabilities similar to those deployed by leading retailers, airlines, telecom companies, and consumer-goods companies.

Data-driven insight: Advanced analytics to increase pipeline and commercial value. Pharma companies sit on a wealth of data, usually locked away in different technical and organizational 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. The authors envisage a world in which most care is “protocolized”—that is, in which clinical decisions on the best treatment options are suggested to physicians by an automated decision algorithm informed by advanced analytics. In this environment, winning pharmaceutical companies will be those able to influence the algorithm. Payors, meanwhile, will be able to develop new approaches to contracting and risk sharing for specialty drugs. Payment based on adherence or cure-rate data, or even “micropricing” based on the daily measurement of specific outcomes and quality of life, are some of the possibilities.

Real-time responsiveness: Automated processes to improve cost, reactions, and agility. Cloud and mobile technology, sensors, and next-generation business intelligence will bring about a new wave of automation in business processes—that is, streamlined, automated work flows with few handovers and end-to-end, real-time transparency on progress, costs, and business value. This will drive a step change in the efficiency, responsiveness, and agility of a wide range of complex, often cross-functional, processes, be they in the back office, the supply chain, R&D, or commercial. In pharmaceuticals, employee on-boarding, sales and operations planning, launch monitoring, and marketing content approval would especially benefit from streamlined, automated work flows and increased transparency.

Capturing the value: Most pharma companies have started to build some digital capabilities, but talent and resources for their efforts can be fragmented, often across hundreds of small initiatives. Without clear strategic direction and strong senior sponsorship, digital initiatives often struggle to secure the funding and human resources required to reach a viable scale, and they cannot overcome barriers related to inflexible legacy IT systems. Talent and partnerships are also critical issues—many companies realize they need to form partnerships to acquire digital capabilities and specialist skills but are often unclear about what kinds of partnerships to set up and how to extract value from them. The authors believe there are three strategic actions pharma companies should take to overcome these obstacles and start on a path that will capture value from digital: (1) Focus on two or three flagship initiatives. It is important to place a few big bets that will each be sponsored by a senior executive, made highly visible to the organization throughout design and pilot phases, and lauded when early wins start coming in. These flagships will need to be properly resourced from the start and supported by partnership initiatives that complement a company’s existing capabilities. The objective is to secure early success, which in turn generates the buy-in and momentum required to drive the next wave of initiatives. The choice of flagship initiatives needs to be based on a company’s pipeline, product portfolio, and business strategy. Companies should therefore identify the distinctive sources of value that digital technologies and capabilities can create in the disease areas

in which they operate, and then define the flagship initiatives to develop solutions for two or three specific use cases. For example, a flagship initiative could be building a digital ecosystem (a solution combining sensors, apps, and services) for patient adherence to an upcoming oncology blockbuster launch drug (the use case); (2) Run collaborative experiments, and then scale what works. Companies cannot be expected to know in detail up front what a winning solution looks like for any particular set of assets in any particular market. For example, it is not possible for a company to design from A to Z a digital medical-affairs ecosystem on paper without experimenting with different channel platforms and content types to understand how key opinion leaders prefer to interact with the company; (3) Develop the organization for new business models. In this new world, it will be vital that IT evolves to be able to manage faster experimentation cycles, while still managing the legacy estate for cost and reliability. This should lead to a two-speed IT function, where “fast domains” operate with different skills, architecture principles, budgeting, and planning cycles to those that exist in “legacy domains” that remain focused on enterprise resource planning and traditional business applications.

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price) with products in the same band receiving the same NHI reimbursement. This bracket rule may also be changed in next revision.

- ◆ **Amgen** will reportedly launch its cholesterol drug, *Repatha*, in Britain at a price of £340.20 (US\$521.70) for a 28-day supply, and US\$6,780 a year compared to the drug’s US\$14,100 annual price in the US market. Meanwhile, the drug will cost around €7,293 and €7,825 (US\$8,220 and US\$8,820) per year in Austria and Finland, respectively. In response to statements of high prices in the US, Amgen said the drug prices were set to reflect unique healthcare environment and marketplace of different countries.

- ◆ The Indian generic drug market in India could expand at a CAGR of 16.3% over 2015-20, reaching a value of US\$27.9 billion (from US\$13.1 billion currently), driven by cheap labor, the patent cliff of blockbuster drugs and a prevalence of lifestyle-related diseases. However, limited consumption of unbranded generics in India, coupled with a lack of drug pricing control laws may impact market growth and is compelling domestic generic drug makers to be target international markets to expand their business.

- ◆ **Sanofi** and **Google’s** unnamed life science company have entered into a partnership to help diabetes patients and their doctors monitor their disease and remain compliant with dosing schedules for glucose-lowering medications. The technologies being developed were not disclosed, but purport to be more than another smartphone application which are often too-easily ignored.

- ◆ **Express Scripts** (US) announced that CEO *George Paz* will retire in May, but will remain nonexecutive chairman, after 11 years as CEO. President *Tim Wentworth* will succeed Paz.

(Sources: IFPMA, McKesson, Pharma Japan, Reuters, Scrip and The Hindu Business Line)