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## **HEALTH SERVICES**

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How pharma companies  
can survive the patent cliff  
through digital innovation

2  
**3**  
4

**02**  
INTRODUCTION

**03**  
DEFINING DIGITAL  
INNOVATION FOR  
HEALTH

**04**  
IDENTIFYING  
OPPORTUNITIES

**05**  
THE DIGITAL  
WELLNESS VISION

**06**  
CHANGE COMES  
FROM WITHIN

**07**  
THE SHIFT  
TOWARD SERVICE

## HEALTH SERVICES

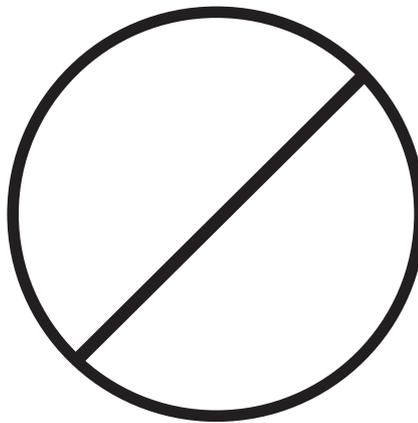
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How pharma companies  
can survive the patent cliff  
through digital innovation



How pharma companies  
can survive the patent  
cliff through digital  
innovation

# INNOVATION THROUGH DIGITAL TRANSFORMATION



The pharma market is about to get busy. 2011–2013 marks a patent cliff, when many big-selling drugs went, or soon will go, off patent. 2013–2015 promises several new products jostling for attention. This time the stakes are even higher than usual, and companies will need to get their new products firmly established to secure future revenues. They will also be launching into a fast evolving digital ecosystem.

Specific products will offer different medical merits but their success will depend on how effectively brands can blend digital into their launch process — and how much value dynamic digital services add to the product offering. Many areas of healthcare have already been busy harnessing the potential of digital in innovative technical ways: gene sequencing, diagnostic imaging, telemedicine, electronic medical records, and so on.

Many believe that pharmaceutical marketing has been slow to find the relevance of digital innovation for standard consumer offerings, but the potential to capitalise on technology for health is limitless. Where entertainment and retail may offer services and interactions that people want, healthcare has the opportunity to create services that people need.

HEALTH SERVICES

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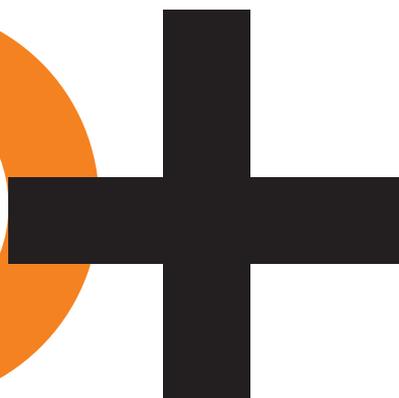
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**26M**

Number of Americans with diabetes

**X3**

Healthcare costs to triple by 2030



**DEFINING  
DIGITAL  
INNOVATION  
FOR HEALTH**

Technology has a track record of creating space. It allows stakeholders on all sides to approach familiar businesses in different ways: by adding new value and stripping out unnecessary costs.

It enables quick-witted incumbents and ambitious newcomers to try out fresh ideas that challenge or even bypass established practice. Experience is showing that virtually every value transaction can be **enriched** and even **reshaped** with digital elements.

1 <http://circ.ahajournals.org/content/123/8/933.long>

2 <http://diabetes.webmd.com/news/20110126/cdc-26-million-americans-have-diabetes>

Thanks in part to said digital innovation, scientific improvements in medicine and surgery have resulted in a dramatic increase in life expectancy, which in turn has given rise to a new class of health issues. Non-communicable diseases caused by lifestyle now have a heavy impact on Americans' healthcare and mortality.

Cardiovascular disease (CVD) is the leading cause of death in the United States, and is responsible for nearly 20% of national health expenditures, with direct costs forecast to triple from the current \$273 billion to \$818 billion in 2030.<sup>1</sup> Almost 26 million Americans have diabetes and an estimated 79 million have pre-diabetes.<sup>2</sup>

Not only does the lifestyle-disease epidemic blight the health and well-being of tens of millions of Americans, it also threatens to overwhelm the healthcare system itself, and the nation's finances. Pharmaceutical companies would do well to intervene by offering the next great wave of innovation in healthcare.

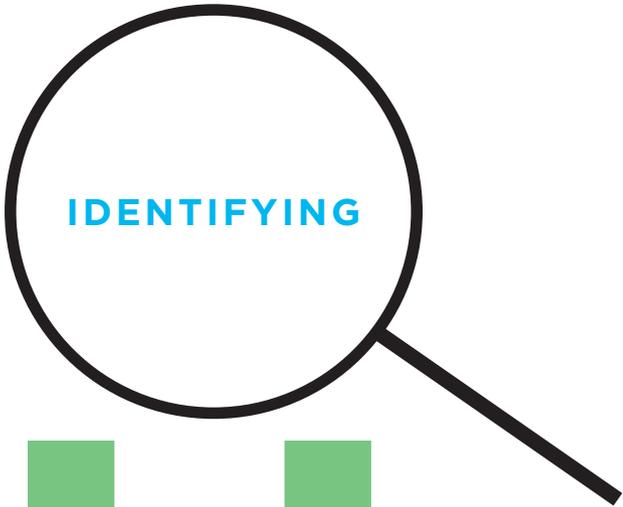
**There are five consumer aspects that must first be understood in order to achieve this:**

- 1— We have a growing understanding of how diseases originate and progress — and hence how they can be prevented and treated
- 2— Patients are rapidly going digital
- 3— Consumers have shown increasing interest in health management and understanding of disease basics
- 4— There is great incentive to find ways of reducing ballooning healthcare costs while improving health outcomes
- 5— The power of technology applied to health and healthcare

Taken together these factors help illustrate the untapped opportunities for digital innovation. They also offer pharmaceutical brands the prospect of connecting more effectively with physicians and patients, prompting a change in marketing objectives as we currently see them—moving from a Point Solutions and Programs approach to Dynamic Systems will shift everything from research focus through market intelligence and patient support to product launches.

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# OPPORTUNITIES



*"Increase in digital healthcare consumers means increased opportunities to raise value and reduce costs."*

To become relevant in the new environment of digital consumer healthcare, traditional healthcare providers and newcomers such as software companies need to understand what counts as value (*what people are willing to pay for*) and what counts as costs for the various audiences at different points in the healthcare journey. Following that, they need to develop a clear vision of what they can do to increase value or reduce costs.

## VALUE

Broadly speaking, for consumers, value in healthcare principally means:

- 1— Being well and feeling well in good times
- 2— Being helped back to health if illness or injury strikes
- 3— Being reliably supported if they develop chronic conditions

For physicians, value means being able to meet the needs of patients as effectively as possible in terms of both health outcome and finance. For pharma companies, value means developing the right products and getting the products into the minds of the right physicians to treat the health problems of the right patients.

## COST

For consumers, cost means not only the money for insurance, medical consultation, medication, and treatment; all of these also cost time, effort, and emotional distress.

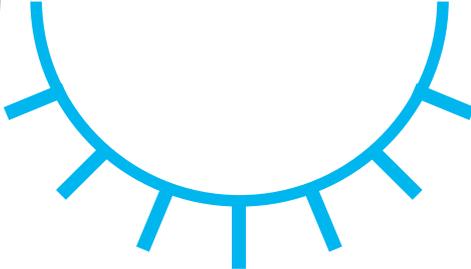
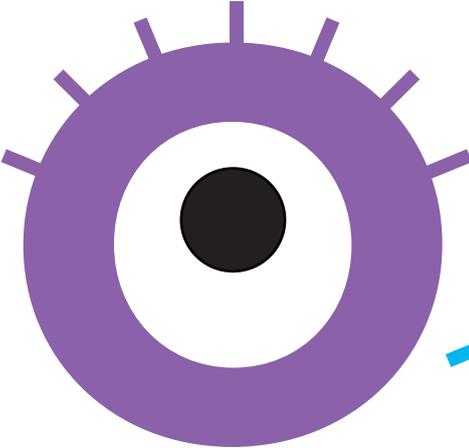
Physicians incur huge cost burdens including time spent on administration and keeping up with developments in their field, time and energy spent trying out different treatment regimens, and time and effort spent dealing with non-adherent patients. For pharma companies, costs include any money, time, and effort expended on communication that doesn't connect with the right people or win them over.

Pharmaceutical companies have developed high levels of expertise in addressing the biological dimensions of disease at a molecular level. As digital ecosystems evolve, they will need to become expert in addressing the thought processes of physicians and patients, and the decisions and behaviour that flow from them. Innovations aiming to make a substantial difference will need to influence behaviour at hundreds of choice points throughout every day. Digital technology offers great scope for doing precisely this. For both types of providers – traditional and newcomers – an increase in digital healthcare consumers means increased opportunities to raise value and/or reduce costs.

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# VISION

## THE DIGITAL WELLNESS



FRANK MOSS  
—  
FORMER DIRECTOR  
OF M.I.T. MEDIA LAB

Former Director of the M.I.T. Media Lab, [Frank Moss](#), has a vision that taps into those opportunities. He calls it the “digital nervous system,” and it’s comprised of inconspicuous wireless sensors on the body, in clothing, and around the home to monitor vital signs and the daily activities that affect health. The data gathered from these devices is analysed by software and displayed in ways that help the user understand the health implications of what they’re doing. This is an innovative form of real-time feedback, helping users to develop greater awareness of their behaviour. If anomalies show up in the monitoring (e.g., accelerated heart rate, raised blood pressure), the system guides the user to run basic tests and take the necessary action: modify behaviour, take OTC medication, set up a remote medical consultation, or visit a doctor.

Another key piece in Moss’ vision includes apps on the user’s smartphone to remind the user of their doctor’s instructions, such as taking medication on time, getting exercise, eating the right food, and staying properly hydrated.

While a small group of “health geeks” may be eager to track and embrace a steady health feedback stream, the key shift needed to make this vision work on a larger scale is for people in all states of health to become more active and better informed participants in their own healthcare. To effectively introduce components of Moss’ vision to the market, companies must be aware of the barriers that hinder the growth of digital in consumer healthcare.

<sup>3</sup> <http://pewinternet.org/Reports/2011/Smartphones.aspx>

## CHALLENGES

Recent Pew research shows that ownership of portable and mobile technologies trails off significantly among older cohorts; for smartphones in particular, Pew finds that 35% of American adults own a smartphone, but that the high levels of adoption are among under-45s.<sup>3</sup> In other words, despite the photos of tech-savvy seniors surfing the net, older Americans are less likely to own or use digital technology.

Some consumers may well find that tracking their health metrics is too tedious, too obsessive, too “anal,” or too much like hypochondria.

There are technical barriers, too. Healthcare IT is hobbled by fragmented patchworks of proprietary programs and systems that don’t communicate with each other. Several big players are vying to create the platform that will integrate systems and resolve the fragmentation: Cerner, Epic, and most recently a joint venture between G.E. and Microsoft.

## OPPORTUNITIES

Healthcare providers such as pharma companies should have a natural advantage overcoming some of these barriers. Sooner or later everybody has to take an interest in their own health or in the health of someone in their life. Figures show that health is one of the top areas of interest online. Tracking, monitoring, and communication devices and services can meet those interests through a variety of channels.

Additionally, Americans have a very long track record of embracing new technology with gusto, from phonographs and automobiles a century ago through radios and TVs to PCs, mobile devices, and social networks. There is no doubt that Americans are more than keen to integrate digital technology into their everyday life. The question is not so much whether they will use digital platforms and services, but rather which of the platforms and services they will choose, and which will they use regularly enough to make a difference.

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cliff through digital  
innovation

# COMES FROM WITHIN



One way companies may be able to foster the adoption of platforms and services, and ultimately influence the larger market, is to start with the sales force. Rather than reps scrambling to meet with physicians on visits, implementing a digital system allows reps to offer HCPs a continuous (*and convenient*) exchange of information that is needs-based, and can take place across multiple channels. Those offerings transfer into systems that also foster communication between HCPs and patients.

Patients then become less dependent on periodic exchanges during appointments and become more empowered to take control of their health.

The more dynamic the system becomes, the more it both encourages and enables stakeholders to use it. That applies particularly to patients with chronic conditions who are most likely to take an active interest in their health, day by day and at multiple points during the day.

For health marketing professionals, this interaction continuum offers scope for timely, effective communication. Analysis of different interaction patterns will make it possible to identify the key moments of different user types. It's at such moments that professionals have the potential to facilitate real conversations and mediate real human connections throughout any health journey.

The more that consumers and professionals use digital technology — especially mobile — the more it becomes a functional intermediary between healthcare consumers, brands, and physicians: delivering information, apps, tools and support geared to answering questions, providing comfort, promoting adherence, and fostering healthy behaviours.

The more useful services that a brand can offer physicians and patients to manage their condition and adapt their lifestyle, the stronger a proposition it will have throughout the patient journey. The growing digital ecosystem gives brands plenty of scope to provide services that add substantial value to their product without adding significant cost burdens either to themselves or to physicians and patients.

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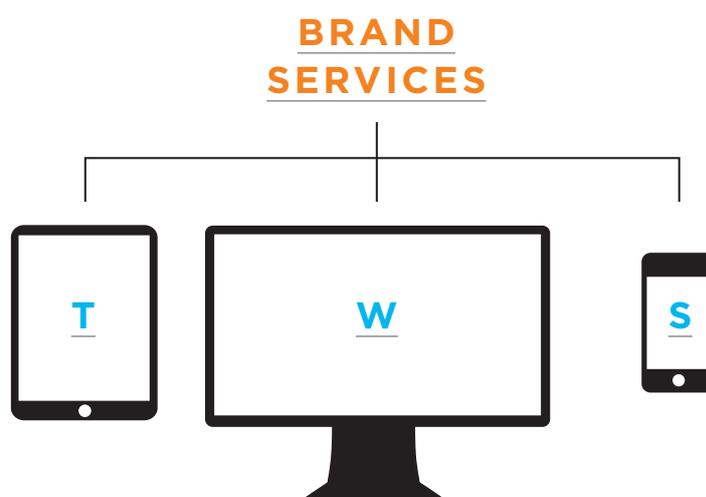
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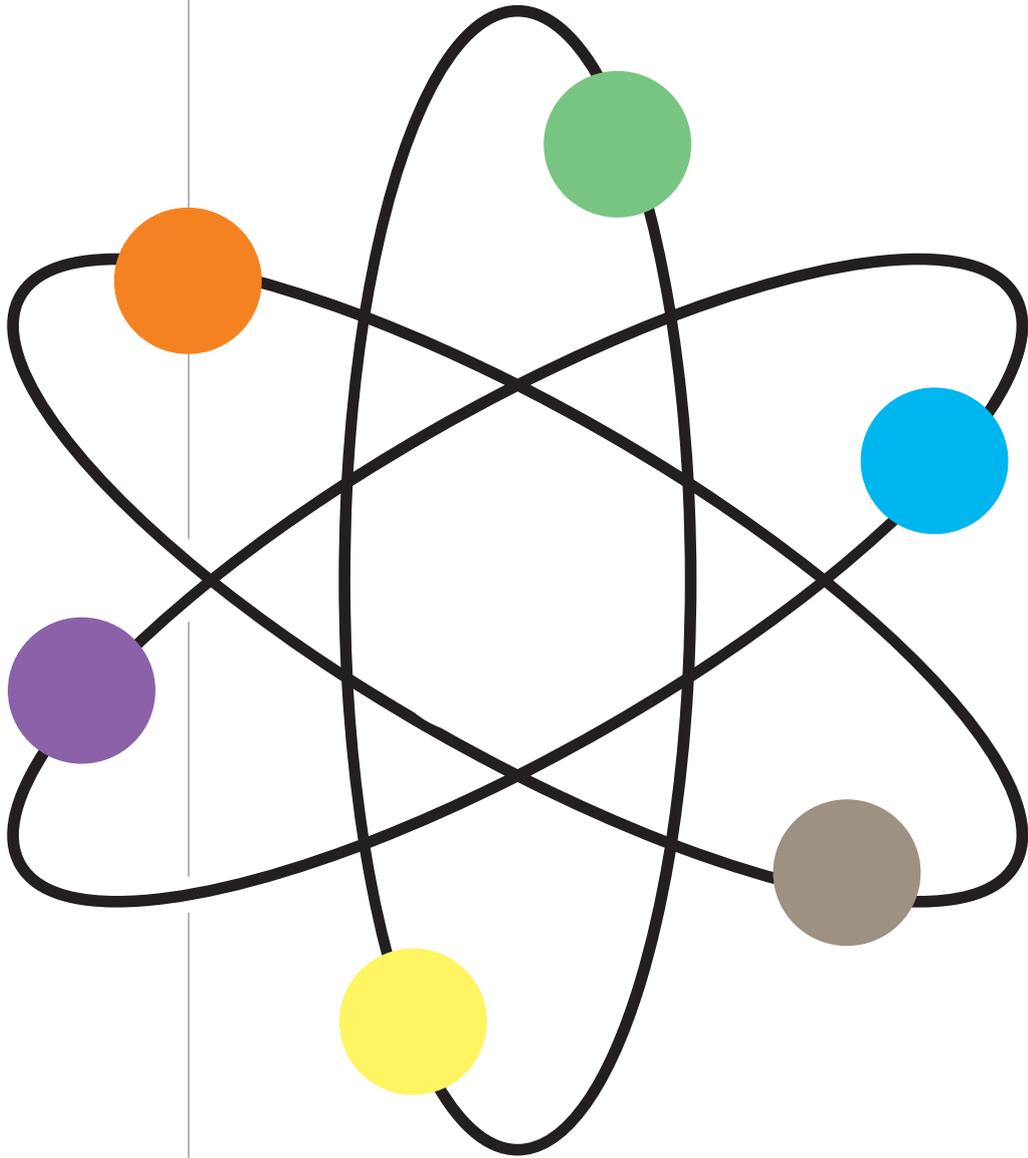


Whatever the underlying IT platform may be, the services will have to be available in web, tablet, and smartphone formats so that users can switch between devices and still access the services seamlessly.



The services should leverage the strengths of each type of interface. A desktop or laptop computer is ideal for inputting text, reading text, and getting a one-screen “dashboard” overview. Smartphones are perfect for capturing on-the-go data: brief text, voice or video notes, and sensor-based inputs such as heart rate and motion data. For healthcare professionals, tablets provide the ability to access medical records, make notes, and share information with patients interactively.

How pharma companies can survive the patent cliff through digital innovation



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*“Looking to the medium term, it’s likely that healthcare professionals and patients will evaluate products not only on their industry standard criteria but also on the value of the cross-platform services package that comes with the product.”*

The services will have to be conceived to meet the practical and emotional needs of stakeholders on the patient journey. Some needs are pretty constant regardless of the condition. For patients, important features include alerts for physician appointments, the ability to keep track of their condition, the treatment and its effect, online information about the condition and its management, social media to connect with other patients, and consumer products relevant to the condition.

Physicians may want access to the patient's treatment tracker, alerts to new resources related to the condition, such as research papers and conferences, and interactive materials to share with patients to help them understand their condition. Ecosystems should aim to link together a broad mix of stakeholders such as family services, navigation services, and site of care to address both rational and emotional needs of patients, caregivers, and HCPs. This cannot be cobbled together as an afterthought, or dreamed up in a marketing silo. Just as the pharmaceutical product itself is conceived and prepared far in advance of the launch, so too will the suite of service elements need to be conceived and built well in advance, and as part of an overall understanding of the patient journey.

As cross-platform dynamic digital services are trialled and established, the basic features outlined in the previous paragraphs will become standardised; brands will be expected to offer them alongside the product. The immediate opportunity is to set the standards in this space. Beyond that, real differentiation and brand advantage will go to those services that best understand the key needs of stakeholders, and meet them most effectively. The crucial edge may come from identifying and meeting a particular unmet need of patients with a specific condition, or it may come from offering better functionality. Whatever the case, it shifts the brand emphasis toward creativity and competition to serve users better.

The chief objective for pharma marketers was once to create a moment of favourable brand interaction between the patient and doctor, typically during an office visit. Creating valuable digital innovations will relieve the pressure from this moment, dispersing the opportunities for brand interaction into the everyday lives of all consumer audiences, in and out of the office. The digital healthcare consumer evolution offers a seamless flow of communication (and data for customer profiling and decision support). It moves communication with patients and healthcare professionals beyond a website model into a distributed, interrelated ecosystem.

Looking to the medium term, it's likely that healthcare professionals and patients will evaluate products not only on their industry standard criteria (Mode of Action, Safety, Administration, Dosing, etc.), but also on the value of the cross-platform services package that comes with the product.

These visible, tangible elements will be vital for products to stand out as distinctive and valuable, both at launch and through their lifecycle. The sooner a pharma company learns how to integrate their medication into high-value disease management services, the better chance they have of gaining first-mover advantage.





