IBM

Maximize efficiency and effectiveness of life sciences processes with IBM Business Process Management.

"**The transformation of healthcare systems creates change throughout the healthcare value chain. This poses a particular challenge for suppliers, such as the pharmaceutical (pharma) industry and device manufacturers, whose organizations are often global and research-based, which creates significant time considerations in responding to change.**"

— IBM Institute for Business Value (IBV), "Healthcare 2015: Win-win or lose-lose"

Life sciences enterprises, including pharmaceutical companies, biotechnology and medical technology ("medtech") organizations, face increasing pressure to deal with rapid industry changes. By the year 2015, we can expect:

- Blockbuster drugs going "off patent" at an unprecedented speed.

- Increasingly difficult expectations for shareholder returns.

- Growing pressure to create products that offer substantive, long-term value.

- An increasing struggle for a balance in public and private healthcare spending.

- Financial responsibility increasingly transitioned to patients.*

To remain viable in the midst of such dramatic change, IBM recommends three "transformations" within life sciences operations:
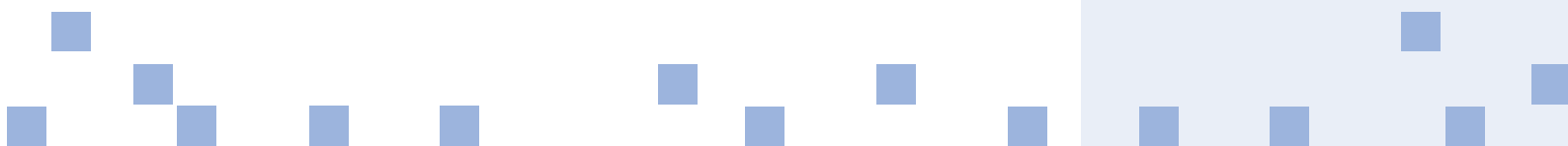
- **Value transformation** — develop offerings that help provide better longer-term outcomes or lower prices for equivalent outcomes.

- **Consumer transformation** — identify the right patients and providers, and educate them to achieve better results across all steps of the care process.

- **Care delivery transformation** — enable new models through simplification and miniaturization, mobile devices and personalized, targeted diagnostic and treatment solutions.

To effect these transformations, life sciences enterprises are challenged to improve in two areas of operation:

- **Research and development** — currently too time-consuming and expensive to produce innovative products for niche pathologies or personalized treatments in a cost-effective manner.

- **Sales and marketing** — insufficiently cost-effective (sometimes more expensive than related research and development) and coming under growing legislative scrutiny for targeting prescribing clinicians rather than patients or pathologies.

Five drivers will change the face of healthcare by 2015:*

- Globalization

- Consumerism

- Aging and overweight populations

- Expensive-to-treat diseases

- New treatments and technologies

Address industry challenges with IBM BPM

IBM BPM can help resolve challenges facing healthcare life sciences enterprises, both now and in the future, by enabling them to:

- **Optimize global business processes** from research to manufacturing to supply chain.

- **Transform sequential R&D processes** and replace paper with automated systems.

- **Leverage "in-licensing" of drugs/ diagnostics** by outsourcing manufacturing and sales.

- **Collaborate with providers and payers/ plans** to justify the cost of therapies.

IBM BPM helps manage the sophisticated business processes needed to maintain profitability by enabling end-to-end process automation, dynamic adaptation and response, and the transformation of business process insight into action. With IBM BPM, augmented by IBM ILOG® for enhanced rules management and dashboards, life sciences enterprises can incorporate legacy systems as components of redesigned and automated processes that are reliable, agile, scalable and easy to manage. As a result, BPM can make the transition from a function-based approach to a process-based approach financially feasible. The enterprise's non-IT users, with minimal IT involvement, can use IBM BPM to model, implement, monitor and modify business processes on a just-in-time basis.

Speed BPM implementation with IBM healthcare supplier solutions and accelerators

IBM offers a range of services, including frameworks and accelerators, to address the most pressing demands of life sciences organizations and gain faster time to value:

- **Clinical trial optimization** includes application integration, BPM, collaboration and data/ document management in an integrated system approach to reduce the time and costs associated with conducting clinical trials, and expedites clinical trials and accelerates product development.

- **Solution for Compliance in a Regulated Environment (SCORE)** includes IBM Cognos® products for business intelligence and performance management; technology for tracking and tracing pharmaceuticals; IBM Maximo® products for asset and service management; and medical imaging management that facilitates the use of medical images throughout the research and development process by effectively managing workflow, image content and distribution within a compliant environment.

- **"Green" IT infrastructure** provides a range of services and solutions, including BPM powered by service oriented architecture (SOA), to facilitate infrastructure efficiency and effectiveness through legacy system reuse.

With a global presence that delivers a deep knowledge of best practices throughout the healthcare and life sciences ecosystem, IBM has the experience, commitment and ability to establish long-term partnerships with life sciences enterprises. IBM offers:

- A strong local presence — worldwide — to provide open-standards leadership.

- Healthcare and life sciences expertise.

- A broad portfolio of solutions specially designed for life sciences and healthcare.

To increase the efficiency and effectiveness of research and development, manufacturing and marketing, life sciences enterprises should modernize these core processes using IBM BPM for modeling, implementation, monitoring and modification capabilities. You can do all this and more with IBM BPM. To learn more, contact your IBM representative or IBM Business Partner, or visit **ibm.com**/industries/lifesciences

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