Red Hat Healthcare

Life Sciences

June 2021

Red Hat

Current State of Life Sciences Industry

Pharmaceutical

Biotech

Medtech

Life Sciences Industry
Transformational Trends

- **Business Model is Being Upended**

- **Outcome-Based Payments are Forcing Digital Transformation**

- **Patients, Patient Data and Patient Engagement will be Front and Center**

- **Significant Investments are Required to Change Business Model(s)**

- **Non-Traditional Entrants will Play a Critical Role**

- **AI and Machine Learning Opportunities will Rise**

SOURCE: PWC, Deloitte

Pharmaceutical Industry
Specific Trends 2021

- **Digital Transformation**

- **IoT and Wearable Technologies Will Be at the Cusp of Value in Life Sciences R&D**

- **Patient Engagement Makes Its Slow Move into the Mainstream**

- **Pharma Teams Up with Payers and Providers to Drive Medication Adherence Using Smartphone Apps**

- **Life Science Sales and Marketing Dips Its Toe into AR/VR for Drug and Device Demos**

- **Outcome-Based Pricing Advances in Medtech But Lags in Pharma and Biotech**

- **Prescriptive Analytics Help Life Science Companies Optimize Supply Chains with an Eye Toward AI**

- **With a Continuing Focus on Near-Term Outcomes, AI Life Science Adoption in 2020 Will Advance in the AI Value Chain**

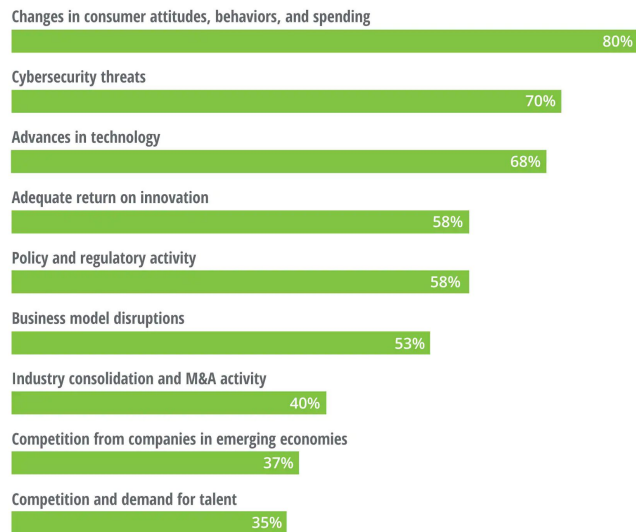- **Digital Twins Find Their Sweet Spot in 2021**

CORPORATE STRATEGY | CONFIDENTIAL   SOURCE: IDC

FIGURE 1

Survey finds changes in consumer attitudes, behaviors, and spending as the top issue, followed by cyber threats and advances in technology

Q: What top five issues do you think will have the greatest impact on your company in the next year?

Changes in consumer attitudes, behaviors, and spending
80%

Cybersecurity threats
70%

Advances in technology
68%

Adequate return on innovation
58%

Policy and regulatory activity
58%

Business model disruptions
53%

Industry consolidation and M&A activity
40%

Competition from companies in emerging economies
37%

Competition and demand for talent
35%

Source: Deloitte LS C-Suite Survey, March–April 2020.

Deloitte Insights | deloitte.com/insights

- Customer Engagement Hub
- Automated Security and HIPAA Compliance
- Digital Transformation
- Connected Health
- Clinical Reasoning
- Open Data Hub
- SAP Life Sciences

SOURCE: Deloitte Life Sciences Insights

Boehringer Ingelheim Delivers Digital Health Solutions Faster with Red Hat OpenShift

Benefits

- Achieved five-times-faster delivery time for innovative health services

- Automated generation of compliant, accurate documentation

- Improved response to demand with automatic scaling

- Enhanced talent attraction and retention

Expanding container success to new opportunities

After its initial success with Red Hat OpenShift and Kubernetes, Boehringer Ingelheim is already expanding the technology to support new use cases, such as machine learning (ML), running databases with operators, and increasing statefulness of applications

A Global Pharmaceutical Company's Journey: Red Hat Customer Engagement Hub (CEH)

Benefits

- Making better use of its enormous data stores

- Enabling sales representatives to make better decisions

- Quickly reacting to new government regulations

- Quickly reacting to new market conditions

- Quickly onboarding new sales representatives

- Providing the latest research for more informed healthcare decisions

New Capabilities

- Integrating existing customer experience solutions

- Capturing real-time data

- Integrating real-time data—or even AI data models—with existing customer experience systems

- Elevating decision management capabilities

- Delivering these capabilities on a scalable and performing platform, which may include any cloud offerings