



In the experience economy, **Life Sciences** companies must reimagine their business, leveraging customer experience and operational data given disruptive competition, patent expiries, and margin erosion.

- Payers, providers, and patients all require improved therapeutic outcomes at a lower cost, as patient centricity is key with focus on customer and brand experience.
- Life sciences companies must use digital technologies to drive revenue through greater insights and collaborative partnerships, leveraging employee experience.

They pursue **three key initiatives** that require **new business capabilities** along the value chain leveraging the digital core.

Improved customer outcomes

Organizations competing as an ecosystem

Digital supply chain and smart factory

R&D/ Engineering	Strategic sourcing and procurement	Demand-driven supply network	Compliant manufacturing	Multichannel sales, marketing, and service	Human resources	Finance
<ul style="list-style-type: none"> <li>Enable product innovations resulting from actual device usage and incident reports</li> <li>Collect structured requirements based on customer and design partner interactions</li> <li>Enable regulatory compliance and reporting</li> <li>Ensure fundamentally new and differentiated patient value propositions such as remote patient, device data capture, and real-world evidence</li> <li>Personalize digital patient and physician experience mapped to needs</li> </ul>	<ul style="list-style-type: none"> <li>Source proprietary and third-party content for value-added services</li> <li>Orchestrate service delivery from value-chain business partner organizations</li> <li>Enable an agile and responsive manufacturing network</li> <li>Collaborate with suppliers to gain visibility on inventory and capacity levels</li> <li>Provide an integrated platform for visibility across the extended value chain, creating actionable insight</li> </ul>	<ul style="list-style-type: none"> <li>Enable demand-driven collaborative supply networks</li> <li>Track and trace individual products</li> <li>Enable agile, cost-effective supply network execution for direct-to-customer fulfillment</li> <li>Apply innovative blockchain solutions to enable wholesale distributors in the U.S. to comply with serialization regulations</li> <li>Ensure product returns feedback has influence on the supply chain</li> </ul>	<ul style="list-style-type: none"> <li>Expand manufacturing and production processes to include goods coupled with services based on real-time customer demand</li> <li>Extend the agile process to include management and delivery of physical goods with high quality, maintaining process consistency</li> <li>Have the ability to manufacture individualized lot sizes</li> <li>Allow manufacturing processes to be tailored to individual customer needs</li> </ul>	<ul style="list-style-type: none"> <li>Transform value propositions to desired outcomes</li> <li>Capture "in-the-moment" customer feedback to better understand emotions and sentiments</li> <li>Enable contextual customer engagement</li> <li>Deliver a best-in-class commerce platform</li> <li>Enable advertising campaign effectiveness</li> <li>Productize new service and revenue models</li> <li>Maximize customer experience and satisfaction across all channels</li> </ul>	<ul style="list-style-type: none"> <li>Attract, secure, and maintain top talent</li> <li>Develop business-outcome-focused mentoring and training programs to upskill new hires</li> <li>Find and contract talent with specific noncore skills to drive new strategies outside the current business scope</li> <li>Enable social collaboration among interdisciplinary teams internally and externally</li> </ul>	<ul style="list-style-type: none"> <li>Develop innovative spend models for products delivered as services</li> <li>Implement AP and AR accounting approaches for products delivered as services</li> <li>Ensure omnichannel solution selling</li> <li>Enable pay-per-use models for smart products</li> <li>Personalize payment options for seamless use across all sales channels</li> <li>Manage access, risk, and compliance</li> </ul>
<ul style="list-style-type: none"> <li>Integrate drug and device development processes to enable collaboration, and reduce design and development costs</li> <li>Use sensors to prompt manufacturers to replace, replenish, or repair in real time</li> <li>Collaborate internally and externally through a single open innovation platform</li> <li>Turn structured and unstructured data from networks and ecosystems into value-based services</li> </ul>	<ul style="list-style-type: none"> <li>Maximize visibility of spend and turn data into actionable intelligence</li> <li>Enable network-driven intelligence combined with integrated spend management functionality</li> <li>Enable procurement strategies for third-party services to be bundled with products</li> <li>Use the IoT to automatically order spare parts and services when maintenance is needed</li> </ul>	<ul style="list-style-type: none"> <li>Ensure mixed manufacturing schedules become agile and flexible through ongoing, real-time data sharing with global supply networks</li> <li>Analyze KPIs, identify supply chain risks, and create alerts all in real time across the entire value chain</li> <li>Ensure transportation management leverages a logistics business network for real-time visibility across third-party logistics providers</li> </ul>	<ul style="list-style-type: none"> <li>Couple and decouple with partners seamlessly across physical and virtual networks with real-time exchange of quality and maintenance information to meet market needs</li> <li>Collaborate in real time across functions and with contract manufacturers and suppliers to orchestrate outcomes in moments of need</li> <li>Minimize production disruptions using SAP Asset Intelligence Network</li> </ul>	<ul style="list-style-type: none"> <li>Enable previously unviable partner ecosystems to orchestrate personalized information, offers, and services tied to consumption, use, and market need</li> <li>Access and analyze structured and unstructured data from multiple channels</li> <li>Optimize engagement along the customer buying journey</li> <li>Enable faster and more efficient crowd service</li> </ul>	<ul style="list-style-type: none"> <li>Train and certify the workforce on new digital technologies</li> <li>Work with universities and external entities in a flexible way</li> <li>Manage external contractors in a flexible way</li> <li>Enable flexible work teams with knowledge sharing and community building</li> <li>Turn new hires into ambassadors</li> </ul>	<ul style="list-style-type: none"> <li>Enable including payment models for digital services into product calculation and financial reporting</li> <li>Manage increased financial risks associated with highly flexible supply chains and manufacturing operations</li> <li>Rapidly assess the impact of new ventures and joint customer initiatives on the overall portfolio, using multilevel what-if simulations</li> </ul>
<ul style="list-style-type: none"> <li>Expand the definition of product to include content for services and engagement, embedding them into innovation processes</li> <li>Maximize access to and reuse of intellectual property and patent information</li> <li>Utilize predictive models to forecast product and formulation properties</li> <li>Drive innovation, manage clinical trial supplies, and improve sourcing and procurement</li> </ul>	<ul style="list-style-type: none"> <li>Ensure the supplier network is mobilized to respond to small or individualized lot-size production</li> <li>Enable a flexible supplier network for rapid order fulfillment across geographies</li> <li>React faster to demand changes with pattern-recognition-based algorithms during sourcing</li> </ul>	<ul style="list-style-type: none"> <li>Combat the production of counterfeit drugs to ensure patient safety and brand protection through the ability to track and trace original products throughout the supply chain</li> <li>Preserve and protect valuable biologics from temperature incursions during shipment</li> </ul>	<ul style="list-style-type: none"> <li>Enable the digital plant – use predictive models to maximize asset uptime and minimize maintenance costs</li> <li>Analyze manufacturing planning and execution through simulations and predictions at any level of granularity</li> <li>Track time out of refrigeration and temperature to ensure better-quality biologics</li> </ul>	<ul style="list-style-type: none"> <li>Enable increased personalization of products as well as highly personalized content, information, and offers</li> <li>Align information and offers to customer preferences, and present them at the moment of need</li> <li>Engage patients along the entire path to purchase</li> </ul>	<ul style="list-style-type: none"> <li>Onboard and train employees quickly and seamlessly</li> <li>Empower employees to make decisions in real time</li> <li>Identify, forecast, and address skill gaps</li> <li>Enable a higher employee-engagement experience through total rewards</li> </ul>	<ul style="list-style-type: none"> <li>Perform simulations and what-if analyses on cost and profit drivers for cost optimization plans</li> <li>Test the impact of your decisions to find the scenarios that offer the greatest business benefits</li> <li>Optimize working capital</li> </ul>

Typical business benefits*						
<ul style="list-style-type: none"> <li>New products revenue: +10% to +20%</li> <li>R&amp;D cost: -20% to -30%</li> <li>Production meeting revenue targets: +15% to +20%</li> </ul>	<ul style="list-style-type: none"> <li>Process function cost: -15% to -20%</li> <li>Worker acquisition time: -30% to -40%</li> <li>Days payable outstanding on targeted spend: -2 to -5</li> </ul>	<ul style="list-style-type: none"> <li>Cost due to stock-outs: -20% to -25%</li> <li>Days in inventory: -10% to -12%</li> <li>Total logistics cost: -10% to -12%</li> </ul>	<ul style="list-style-type: none"> <li>Total manufacturing cost: -10%</li> <li>Manufacturing cycle time: -10%</li> <li>Inventory levels: -25% to -30%</li> </ul>	<ul style="list-style-type: none"> <li>On-time delivery: +10% to +20%</li> <li>Service delivery cost: -4% to -5%</li> <li>Customer satisfaction: +10% to +20%</li> </ul>	<ul style="list-style-type: none"> <li>Time and attendance function cost down</li> <li>HR FTEs: -44%</li> </ul>	<ul style="list-style-type: none"> <li>Days to close annual books: -40 to -50</li> <li>Budget and forecasting cost: -25% to -50%</li> <li>Audit cost: -20% to -40%</li> </ul>

Experience	qualtrics	customer experience	product experience	brand experience	employee experience
Analytics:	Augmented business intelligence		Collaborative planning	Predictive analytics	Data warehousing
Intelligent technologies:	Data-driven insights		Intelligent robotic process automation	Conversational AI	Internet of Things, cloud and edge
Database and data management:	Data pipelining	Data virtualization	Data governance	Storage and processing	Connection management
Application development and integration:	Integration suite		Intelligent business process management	Enterprise extensions	Digital experience

Operations	SAP S/4HANA®	Business areas	SAP Ariba	SAP Fieldglass	SAP Concur	SAP Fieldglass	SAP Concur	SAP SuccessFactors	SAP Concur	SAP Ariba
	<ul style="list-style-type: none"> <li>Product development and project control</li> <li>Production engineering</li> <li>Variant configuration</li> <li>Embedded sales warehouse management</li> </ul>	<ul style="list-style-type: none"> <li>Operational purchasing</li> <li>Collaborative sourcing and contract management</li> <li>Invoice and payables management</li> <li>Supplier management</li> <li>Procurement analytics</li> </ul>	<ul style="list-style-type: none"> <li>Inventory and basic warehouse management</li> <li>Production planning (enhanced material requirements planning)</li> <li>Real-time inventory management</li> <li>Multilevel goods receipt</li> </ul>	<ul style="list-style-type: none"> <li>Production orchestration and execution</li> <li>Enhanced material requirements planning</li> <li>Quality management</li> </ul>	<ul style="list-style-type: none"> <li>Order and contract management</li> <li>Sales order fulfillment cockpit</li> <li>Service management</li> <li>Settlement management</li> <li>Service spare parts and agreements</li> </ul>	<ul style="list-style-type: none"> <li>Time recording</li> </ul>	<ul style="list-style-type: none"> <li>Accounting and closing operations</li> <li>Core accounting</li> <li>Cost management and profitability analysis</li> </ul>			
	<ul style="list-style-type: none"> <li>Enterprise portfolio and project management</li> <li>Commercial project management</li> <li>Compliant product lifecycle management</li> </ul>		<ul style="list-style-type: none"> <li>Response and supply orchestration</li> <li>Advanced order promising (AATP)</li> <li>Constraint-based production planning</li> <li>Production scheduling</li> </ul>		<ul style="list-style-type: none"> <li>Sales planning and performance management</li> <li>Billing and revenue innovation management</li> </ul>		<ul style="list-style-type: none"> <li>Financial planning and analysis</li> <li>Accounting and financial close</li> <li>Treasury management</li> <li>Receivables management</li> <li>Invoice management and accounts payable</li> </ul>			
	<ul style="list-style-type: none"> <li>Engineering control center</li> <li>Product lifecycle management and visual enterprise</li> <li>Master data governance</li> <li>Product data submission management</li> <li>Global batch traceability</li> <li>Global trade services</li> </ul>	<ul style="list-style-type: none"> <li>Spend visibility</li> <li>Collaborative sourcing</li> <li>Collaborative supply chain</li> <li>Procure to pay</li> </ul>	<ul style="list-style-type: none"> <li>Advanced track and trace for pharmaceuticals</li> <li>Integrated business planning</li> <li>Service parts planning</li> <li>Extended warehouse management</li> <li>Global batch traceability</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturing execution</li> <li>Manufacturing integration and intelligence</li> <li>Visual manufacturing planner</li> </ul>	<ul style="list-style-type: none"> <li>Commerce cloud</li> <li>Sales cloud</li> <li>Marketing cloud</li> <li>Service cloud</li> <li>Configure, price, quote and billing</li> </ul>	<ul style="list-style-type: none"> <li>Core human resources and payroll</li> <li>Talent management</li> <li>Time and attendance management</li> <li>Human capital analytics</li> <li>Learning management</li> </ul>	<ul style="list-style-type: none"> <li>Business planning and consolidation for S/4HANA</li> <li>Shared service framework</li> <li>Lease administration</li> <li>Governance, risk, and compliance</li> <li>Digital payments add-on</li> </ul>			

\*Benefits are based on early adopters of SAP S/4HANA or conservative outside-in benefits due to moving from a traditional ERP system to SAP S/4HANA, SAP Intelligent, and other relevant SAP solutions.

FEEDBACK