

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

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.



Improved patient outcomes

Organizations competing as an ecosystem

Digital supply chain and smart factory

Research, development, engineering, and compliance	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> </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	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 governance	Connection management	Data orchestration	Metadata management
Intelligence: Application development and integration: Integration suite	Intelligent business process management	Enterprise extensions	Digital experience	

SAP S/4HANA®	Business areas
<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>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>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>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>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>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>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>Sales planning and performance management</li> <li>Billing and revenue innovation management</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>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>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>
	<ul style="list-style-type: none"> <li>SAP Ariba</li> <li>SAP Fieldglass</li> <li>SAP Concur</li> </ul>
	<ul style="list-style-type: none"> <li>SAP SuccessFactors</li> <li>SAP Concur</li> <li>SAP Ariba</li> </ul>

FEEDBACK