

# Driving Digital Transformation in Medical Devices with AI and Cloud

## BREAKTHROUGHS FOR LIFE

Ajay Sathyanarayana

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A futuristic medical scene with a robotic arm and a tablet displaying brain scan data. The background is a dark teal color with a blurred image of a robotic arm and a tablet. The tablet screen shows a central brain scan with various data points and graphs. The text is white and set within a white-bordered box on the left side of the image.

# Innovating healthcare through intelligent and connected technologies

# Accelerating R&D with AI-Driven Insights

## AI/ML for Faster Design Cycles and Predictive Performance



### Market Growth Opportunity

MedTech and AI in medical devices markets are growing rapidly, highlighting vast opportunities for innovation and investment.



### AI-Driven Predictive Modeling

AI enables predictive modeling of device performance, reducing physical prototyping needs and speeding up design iterations.



### Integrated Platform Solutions

Infosys Topaz platform delivers GenAI-powered FMEA, digital thread enablement, and aligned validation workflows for efficient R&D.



### Human Factors and Prototyping

Kaleidoscope's human factors engineering, rapid prototyping, and usability labs simulate real clinical environments for better design.



# Enabling Faster Time-to-Market with Agile Digital Models

## Cloud-native and DevSecOps for Accelerated Delivery



### Market Growth in Digital Health

Digital health market is expanding rapidly, expected to reach \$1.5 trillion by 2032 with a CAGR of 19.66%.



### Cloud-native and DevSecOps Adoption

MedTech firms use cloud-native architectures and DevSecOps to enable agile, secure, and scalable digital operating models.



### Innovative Platforms for Efficiency

SubmitRight and Kaleidoscope platforms accelerate regulatory processes and enhance design agility, improving release velocity by 30-40%.



# Enhancing Compliance with Secure, Data-Driven Ecosystems

## Navigating FDA and EU MDR with digital trust solutions



### Regulatory Challenges in MedTech

FDA's PCCPs and EU AI Act increase regulatory demands on AI-enabled medical devices classified as high-risk.



### Audit-ready Digital Ecosystems

Infosys Helix ensures HIPAA, GDPR, and Part 11 compliance with integrated digital solutions for documentation and lifecycle management.



### Clinical Evidence Management

INSIGHT portal facilitates clinical video and data collection, streamlining regulatory submissions and audits effectively.



### Impact on Compliance Efficiency

Integrated solutions reduce compliance efforts by up to 30% and decrease audit findings by 40%, enhancing patient trust.



# Improving Patient Outcomes Through Connected, Digital-First Experiences

## IoMT and Real-time Data for Personalized Care



### Market Growth of IoMT

IoMT market is expected to grow significantly, reaching \$658 billion by 2030 at an 18.2% CAGR.



### Connected Devices and Analytics

Connected devices and real-time analytics enable personalized and proactive care for chronic disease management.



### Platform and UX Innovations

Platforms like Infosys Helix and Kaleidoscope improve remote monitoring, workflow, and clinical media analytics.



### Improved Patient Outcomes

Innovations lead to 15–20% better patient adherence and up to 30% fewer hospital readmissions.



# Unlocking Productivity with Cloud-Powered Automation

## Automation and Scalability for Operational Efficiency



### Cloud-Powered Automation

Cloud automation platforms enable scalable operations in IT, billing, and order management for MedTech enterprises.



### Enhanced Operational Frameworks

MES–LIMS frameworks and DataOps/MLOps pipelines improve data integration and operational efficiency in manufacturing.



### Advanced Training and Design

AR/VR training tools and DFMA practices optimize manufacturing and support for better serviceability.



### Measurable Efficiency Gains

Combined solutions deliver significant improvements in equipment effectiveness and cost reductions in operations.



# Conclusion and Call to Action

## Partnering for Smarter, Safer, Scalable Healthcare



### Technology Convergence

AI, cloud, and connected technologies are transforming the medical device industry comprehensively.



### Unified Product Lifecycle Support

End-to-end support from design to commercialization ensures seamless innovation in healthcare devices.



### Human-Centric Innovation

Platforms like Topaz, Cobalt, and Helix focus on user-centered solutions to enhance patient care.

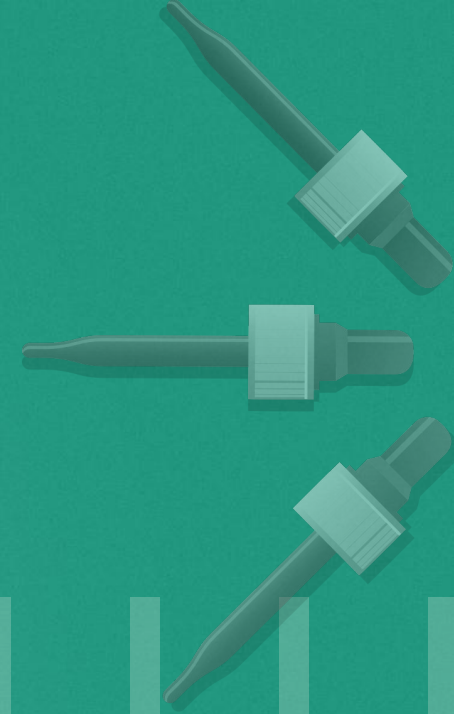


### Collaborative Future Building

Partnering to create smarter, safer, scalable healthcare solutions for digital-first patient care.



# Thank you



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