



INTEGRATING AI FOR ENHANCED HCP ENGAGEMENT

Introduction

Background

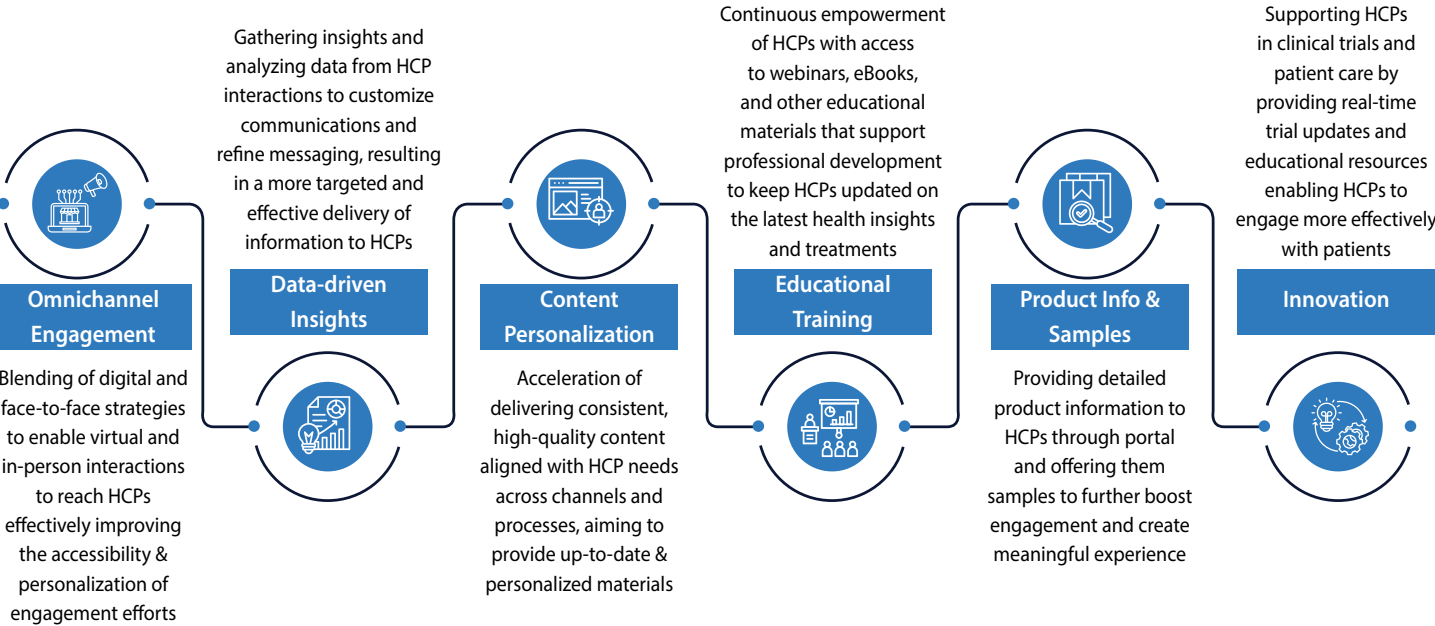
The healthcare sector is constantly evolving, with professionals requiring continuous learning to stay updated on the latest medical developments, practices, technologies and treatments. There are web-based applications that help Healthcare Professionals (HCPs) with information on medical products, learning materials, patient care resources and access to webinars and conferences. However, with the introduction of Artificial Intelligence (AI), the application can be significantly enhanced to meet personalized and dynamic needs of HCPs along with other digital interventions.

AI can not only automate processes but also create customized learning paths, offer tailored content recommendations, and enable the real-time answering of their queries.

This article aims to outline how AI can be effectively integrated into the existing landscape of HCP engagement journey to create a smarter, more interactive, and personalized interaction.









Evolving Landscape of Consumer Healthcare















Infosys has been supporting clients across various HCP touchpoints through strategic technology interventions aimed at enhancing operational efficiency and improving patient outcomes



Exploring the conventional HCP engagement journey and understanding existing challenges

STAGES	 Awareness	 Registration	 Education	 Interaction	 Growth	 Retention
	<ul style="list-style-type: none"> • Websites • HCP-centric resources on web pages • Complementary Product samples 	<ul style="list-style-type: none"> • Personalized Experience • Virtual Events/ Webinars • FAQs resources, onboarding support 	<ul style="list-style-type: none"> • Learning Modules • Quizzes/ Assessment • Networking Events 	<ul style="list-style-type: none"> • Virtual Assistants • Quick Search • Real-time chatbots & Support systems • HCP forums 	<ul style="list-style-type: none"> • Rewards Program • Detailed Analytics & Insights • Personalized offers & Recognition programs 	<ul style="list-style-type: none"> • Retarget mailers • Continuous campaigns • Social sharing and advocacy tools
TOUCHPOINTS						
CHALLENGES	Omnichannel Complexity	Compliance & Regulations	Content Personalization	Sustaining Engagement & Trust	Data-driven Insights	Continuous Campaigns
	Managing multiple channels to ensure consistent and effective communication can be challenging	Ensuring that the registration process complies with various regulations and standards can be complex	Creating and delivering personalized educational content that meets the specific needs of HCPs can be resource-intensive	Maintaining continuous engagement and building trust with HCPs through interactions is crucial but challenging	Gathering and analyzing data from HCP interactions to tailor communications and refine messaging is essential for growth but can be complex	Running continuous campaigns to keep HCPs engaged and loyal requires significant effort and resources
	Personalized Data Utilization	Technical Issues	Meaningful Engagement	Real-time Support	Efficient Scalability	Personalized Offers & Recognition Programs
	Leveraging data to create personalized experiences for HCPs is often difficult due to data silos and integration issues	Problems such as special characters in city names and missing mandatory fields causing registration failures and order submissions	Keeping HCPs engaged with educational content over time is a significant challenge	Providing real-time support and quick responses to HCP queries can be difficult without advanced systems in place	Scaling engagement efforts to cater to an increasing number of HCPs without proportional increases in resources	Developing and maintaining personalized offers and recognition programs to retain HCP

Benefits of integrating AI into HCP engagement for enhanced interaction

STAGES	 Awareness	 Registration	 Education	 Interaction	 Growth	 Retention
HCP Omnichannel journey	 Workshops, webinars etc.	 Capture Information & Sign in	 Learning modules & Educational material	 Quizzes, ordering samples, chatbots	 Personalized content and recommendations	 Loyalty Programs
	The HCP is engaged through targeted webinars to build awareness	The HCP captures key information & starts registration via HCP engagement portal	The HCP begins exploring learning modules & educational material	The HCP accesses quizzes, orders samples & interacts with chatbots	The HCP receives tailored content based on their interests and queries.	HCPs are engaged through rewards system and webinars



AI ENHANCEMENT	AI analyzes publicly available data to personalize initial outreach, ensuring that HCPs receive highly relevant, specialty-specific content right from the beginning.	AI customizes registration questions based on the HCP's specialty. For example, if the user is a pediatrician, the questions will focus on pediatrics.	AI presents tailored learning tracks based on the HCP's specialty, prior learning activity, and preferences.	If the HCP struggles with a concept, AI suggests more engaging exercises, leverages mining and smart search to respond to HCP's queries.	AI delivers personalized content & recommendations to HCPs by analyzing interests and past interactions, ensuring engaging experience.	AI compiles the HCP data and provides recommendations on future webinars, newly launched samples etc.		
ENABLER	Natural Language Processing (NLP) spaCy	Machine Learning Framework PyTorch	Dynamic Content Generation Power BI	AI-Powered Predictive Analytics aws	Cloud Platforms' AI Services Azure	Recommendation Engines Google Cloud	Content Management System IBM Watson	CONTENTSTACK™
VALUE*	↓ 30% Form Abandonment	↑ 50% Boosts Engagement	↑ 20% User Satisfaction	↓ 30% Drop-off Rates	↓ 40% Support-related Costs	↑ 30% Course Relevance		

*Source: <https://www.matsh.co/en/statistics-on-personalized-learning-effectiveness/>



Conclusion



Integrating AI into the HCP engagement journey presents a transformative opportunity to overcome long-standing challenges such as data silos, compliance complexities, and resource-intensive personalization. By leveraging AI technologies like NLP, predictive analytics, and recommendation engines, organizations can deliver tailored content, streamline registration, enhance educational experiences, and provide real-time support. This not only boosts engagement and satisfaction but also drives operational efficiency and scalability.



Next Steps...



Pilot AI-driven **personalization** in content delivery and registration workflows



Collaborate with **technology partners** to co-develop scalable AI solutions



Integrate AI-powered **tools** such as chatbots, recommendation engines, and predictive analytics



Expand AI **capabilities** to include dynamic content generation and real-time support across multiple channels



Break down **data silos** by implementing centralized data management systems



Monitor **key performance metrics** to measure AI effectiveness



About the Authors



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Astha is a Principal in Infosys Consulting's Life Sciences practice with more than 14 years of experience. She has worked in multiple large-scale digital strategy and implementation programs across various industries, including consumer healthcare, oil and gas, and consumer products.



Bilal

Bilal is a seasoned Business Consultant with over 10 years of experience, specializing in business analysis, strategic consulting, and functional solutioning. He brings deep expertise in translating business needs into actionable insights, requirements elicitation, and stakeholder engagement. Bilal has worked extensively across the Healthcare and Life Sciences domains, contributing to transformative initiatives in digital enablement, workflow optimization and automation and data management.

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