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IDC InfoBrief

Cloud Enterprise Medical Imaging

Unlocking Accreditive Value through Cloud and SaaS Technologies — A European Perspective

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Table of Contents

In This InfoBrief

This IDC InfoBrief offers insights into Cloud Enterprise Medical Imaging. Using data from the IDC EMEA, IDC Health Insights European Healthcare Survey 2024 and IDC EMEA Cloud Survey, it analyzes industry trends, challenges, and opportunities.

Cloud Enterprise Medical Imaging, combining cloud, SaaS, and managed services, can address staffing shortages, optimize workflows, and improve system uptime.

This InfoBrief explores how these technologies benefit European healthcare providers, helping them deliver better patient care, improve efficiency, and achieve a strong ROI.

Medical Imaging Faces Growing Challenges, Demanding Innovative Solutions

Enterprise Medical Imaging faces growing operational complexity and challenges, including:

Managing growing, integrated ecosystems and a rising volume of imaging exams.

More complex cases requiring higher levels of precision and collaboration.

Growing staff shortages coupled with the need to maximize staff efficiency.

Balancing tight budgets amid operational efficiency pressures, inflation, and rising costs.

Resulting in hybrid ways of working - onsite, remote, outsourced

Enterprise Medical Imaging Enhances Efficiency, Data Access, and Care Collaboration, Improving Patient Outcomes

Enterprise Medical Imaging solutions are pivotal in addressing the challenges faced in medical imaging by:

Enhancing **operational efficiency** through unified medical image management.

Promoting **seamless integration and access to imaging data** across departments through a seamless network for accessing and exchanging medical images.

Supporting increased **care collaboration** and **clinical confidence.**

Enabling **intelligent, context-aware workflows** into the user experience.

Medical Imaging is Transitioning from a PACS Landscape to Integrated Enterprise Medical Imaging Platforms and Networks

PACS (Picture Archiving and Communication System):

Traditionally focused on radiology and specific imaging departments, often siloed, with limited interoperability and collaboration capabilities.

Enterprise Medical Imaging:

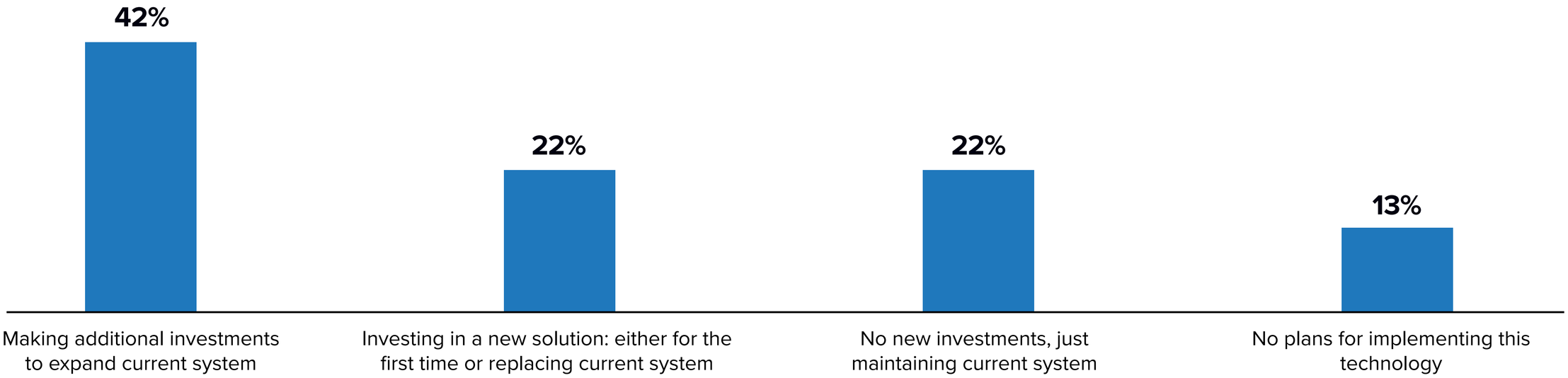
A holistic approach integrating imaging data across various departments (radiology, cardiology, pathology, etc.) into a unified platform and network, scalable and operating on a single database.

Enterprise Medical Imaging Investments Vary Widely in Maturity Across Europe

Enterprise Medical Imaging investments across European healthcare organizations show significant diversity in maturity and sophistication. Strategies range from maintaining basic operational capabilities to making strategic investments in innovative solutions that enhance efficiency and optimize medical imaging departments performance.

2/3 of European healthcare organizations are actively investing in advancing their Enterprise Medical Imaging capabilities.

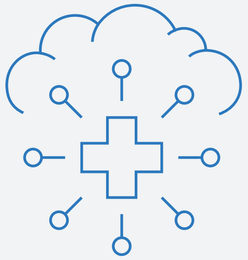
Current and planned investments in Enterprise Medical Imaging from 2024 to 2025



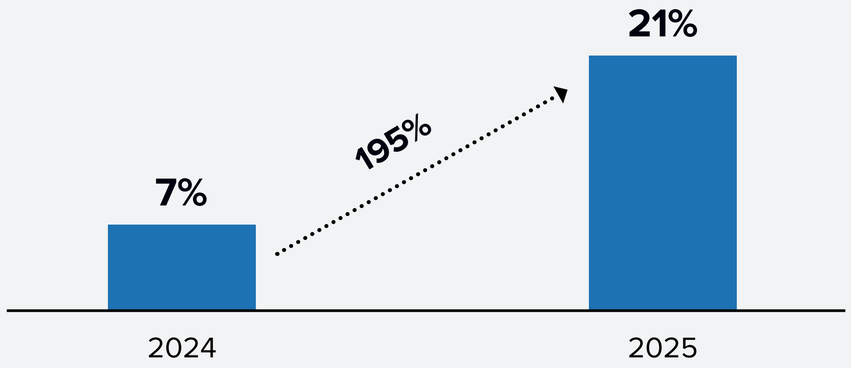
European Healthcare Organizations are Accelerating their Cloud Adoption

By enhancing data management and enabling greater collaboration, cloud applications offer a cost-effective alternative to traditional on-premises solutions. Despite higher initial costs, SaaS solutions can deliver long-term financial benefits through dynamic resource allocation, automated updates, and subscription-based pricing. With improved security, scalability, and reduced maintenance, cloud platforms are increasingly attractive for critical systems like Enterprise Medical Imaging.

Organizations with 51–75% of Applications running in Public Cloud: 2024 vs. 2025



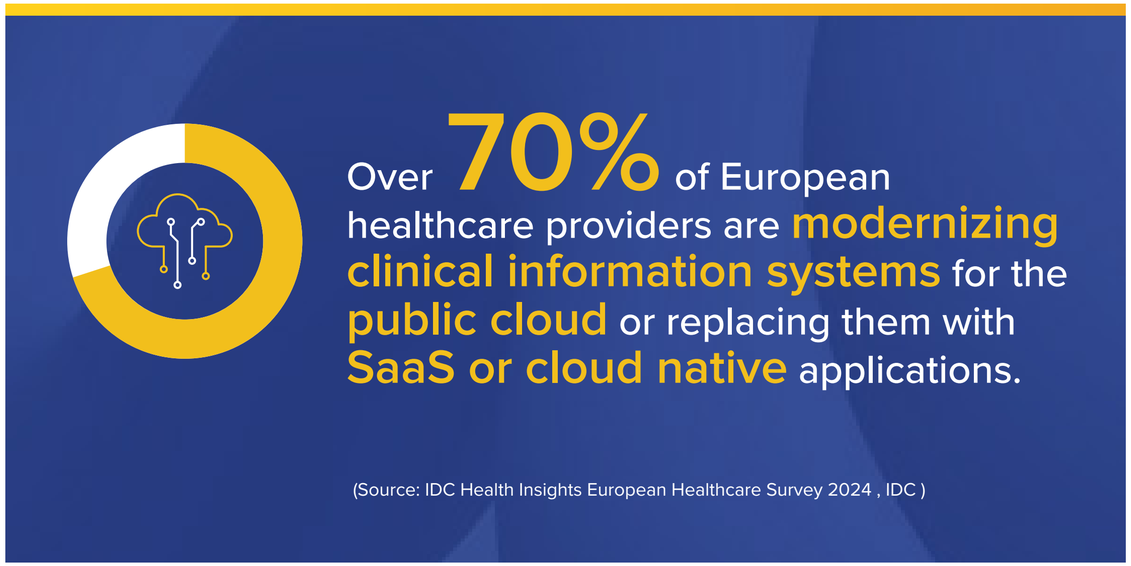
From 2024 to 2025, the number of healthcare organizations running over half of their applications in the public cloud is expected to increase **by 195%.**



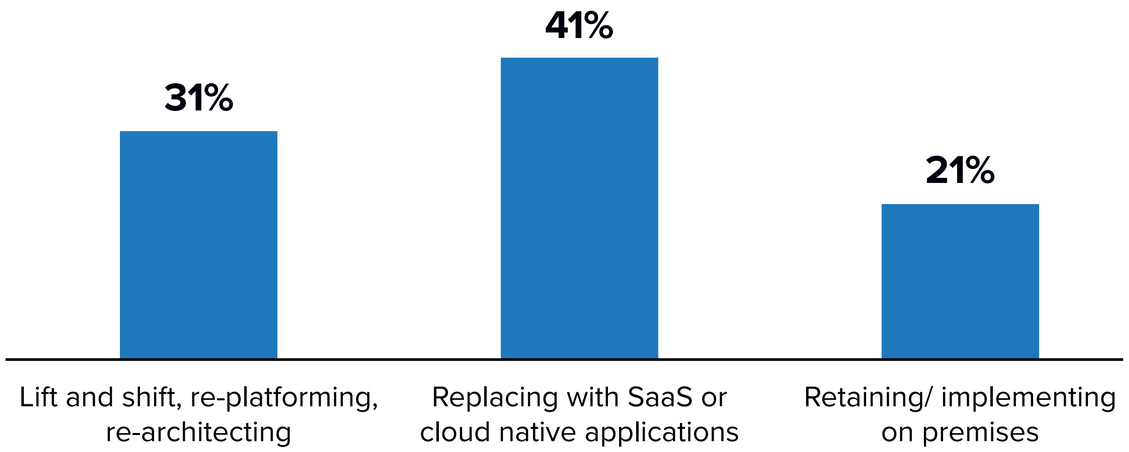
(Source: IDC EMEA Cloud Survey 2024)

The Shift to Cloud Adoption Is Not Just About Keeping Pace But Leading The Way

European healthcare providers, facing rising operating costs and IT staffing shortages, are increasingly turning to cloud solutions for greater resilience and innovation. Initially used for back-office tasks, cloud is now expanding to critical areas like EHRs and medical imaging solutions. This shift highlights the cloud's potential to reduce operational burdens and improve reliability, security, IT management, and costs.



What are your organization's plans for clinical information systems (EHR, imaging, departmental systems etc.) modernization?



Given The Sensitive Nature And Criticality Of Medical Imaging Data, It Is A Prime Target For Malicious Actors

The rise in frequency and severity of cyberattacks on healthcare, such as recent breaches at in the UK in Italy that disrupted diagnostic services for weeks, highlights the sector's vulnerability and urgent need for stronger cybersecurity.

The European Union Agency for Cybersecurity (ENISA) highlights healthcare as a prime target, with the sector **accounting for 31% of incidents reported under the NIS Directive**[1].

Addressing this risk, European governments prioritize **new action plans** to strengthen healthcare cybersecurity. Supporting these goals, **Cloud Enterprise Medical Imaging solutions provide a critical layer of defense,** leveraging advanced security and expertise from cloud providers to protect sensitive patient data from breaches and ensure privacy.

48% of European healthcare providers are investing in **cloud infrastructure and platforms** as part of their **cybersecurity and digital trust strategy.**

(Source: IDC Health Insights European Healthcare Survey, IDC 2024)

[1] ENISA THREAT LANDSCAPE: HEALTH SECTOR 2023; Threats and risk management in the health sector Under the NIS Directive. NIS Cooperation group 2023

Top 5 Drivers For Adopting Cloud in European Healthcare Organization

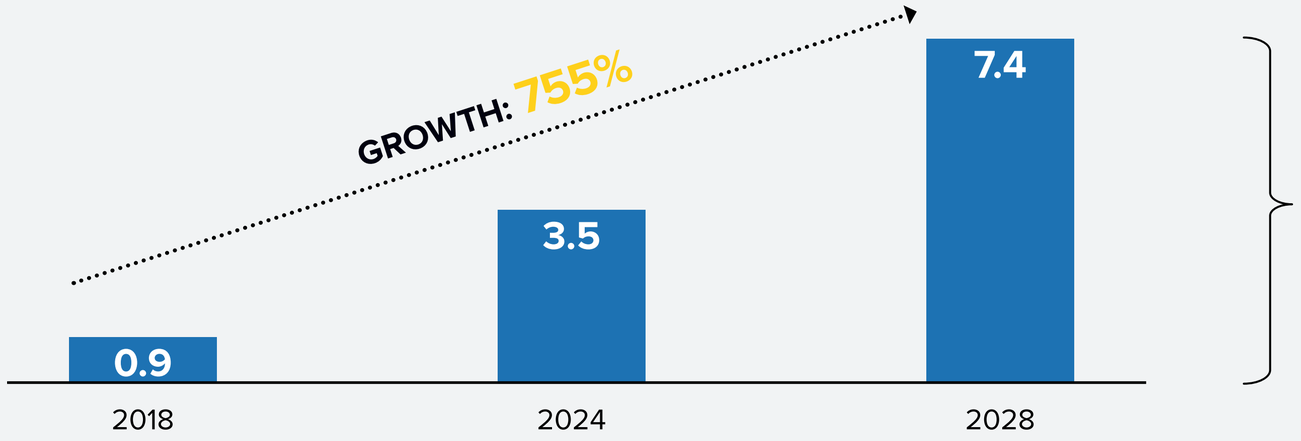
RANK	DRIVER	PERCENTAGE
1	Strengthened capabilities for improving patient services and experience	39%
2	Enhanced data security and regulatory compliance	30%
3	Improving IT systems total costs of ownership	29%
4	Support for Environmental, Social and Governance (ESG) goals	27%
5	Enablement of industry ecosystem participation	23%

(Source: IDC Health Insights European Healthcare Survey, 2024, IDC)

Cloud Enterprise Medical Imaging Can Tame Data Growth and Complexity

Cloud Enterprise Medical Imaging solutions are now critical for managing the exponential growth of healthcare data. By providing scalable, secure, and intelligent platforms, these SaaS solutions dynamically optimize resources and seamlessly handle complex imaging workflows, outperforming on-premises options. By leveraging these solutions, healthcare organizations can transform data volume challenges from a technical burden into a strategic advantage, enabling more efficient, resilient, and advanced medical images management.

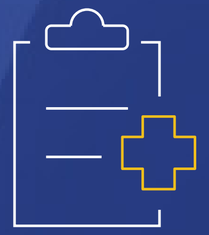
Volume of Medical Imaging Data in Europe



Medical imaging data in Europe is projected to grow nearly eightfold between 2018 and 2028.

The IT and Business Cases for Cloud Enterprise Medical Imaging, When Converged, Lead to Success

The convergence of IT and business objectives is driving the growing adoption of Cloud Enterprise Medical Imaging. Both sides see Cloud Enterprise Medical Imaging as key to better patient care and financial health. Cloud agility and reduced TCO bridge the gap, letting healthcare organizations unify clinical and financial goals to future-proof operations and drive new value creation.



IDC research shows a shared commitment across IT, medical and administrative executives to invest in Enterprise Medical Imaging as a strategic priority.

Percentage of European Healthcare Executives Planning to Increase Enterprise Medical Imaging Spending (2024-2025).

65%

Information Technology

64%

Line of Business

(Source: IDC Health Insights European Healthcare Survey, IDC 2024)

Cloud Enterprise Medical Imaging is Facilitating the Transformation of the Imaging Services Landscape

Across Europe, healthcare is transforming diagnostics to increase capacity, enhance care quality, and address financial and workforce shortages, including a 1.3 million-professional gap, particularly in imaging specialties[1]. Redesigning diagnostic access is a key priority in operational excellence programs[2]. Cloud platforms drive this transformation by supporting new care delivery models and optimizing operations, while advancements in medical imaging diagnostics continue to accelerate.

The English NHS is establishing 170 Community Diagnostic Centers (CDCs) to transform diagnostic services delivery, streamline patient pathways, and ensure sustainability. Success relies on robust data sharing, workflow orchestration, and digital connectivity. Cloud Enterprise Medical Imaging Platforms are essential, offering images management, clinical decision support, and AI-driven workflow optimization[3].

Cloud platforms support CDCs in their key goals:

Reduce health inequalities through standardized access.

Improve capacity utilization and enhance operational performance.

Drive innovation in clinical workflows, and patient experiences with AI-driven capabilities.

[1] OECD: Ready for the Next Crisis? Investing in Health System Resilience (2023) https://doi.org/10.1787/1e53cf80-en
[2] IDC Health Insights European Healthcare Survey 2024 , IDC
[3] NHS England Community diagnostic centres – guidance for planning, design and implementation https://www.england.nhs.uk/publication/community-diagnostic-centres/

Selecting the Right Cloud Deployment Model is a Critical Strategic Decision, as is Having the Right Partner Along the Journey

Cloud deployment offers superior scalability, cost-efficiency, and interoperability for Enterprise Medical Imaging worldwide. It enables innovation, simplifies system convergence, and reduces operational overhead. While both cloud and on-premises options exist, the cloud's advantages make it a strong choice for modernizing Enterprise Medical Imaging at scale. The key is to select a deployment model that aligns with your goals and the right partner to ensure a successful implementation with maximum benefits.

Feature	On-Premises (Traditional)	On-Premises (Managed Services)	Private Cloud	Hybrid Cloud	Public Cloud
Ownership	**Organization-owned hardware; can vary in managed services**	Provider-owned hardware typically	Organization or provider depending on setup	Combination	Third-party provider
Control	**Full control over hardware, software configurations, and data**	Provider manages hardware/software, organization controls data	High control over data; may share hardware/software management	Shared control over data and hardware/software configurations	Limited control; mainly over data and specific software settings
Scalability	**Limited**	Moderate to high	Moderate	High	High
Cost	**High upfront, ongoing**	Lower upfront, subscription-based	High upfront, lower ongoing	Variable	Pay-per-use
Security	**High control over security measures**	Security managed by provider, aligned with organization's policies	High control, provider-managed options	Shared responsibility, customizable	Shared responsibility, standardized by provider
Compliance	**Full control**	Compliance managed by provider within organizational requirements	High control, provider-managed options	Shared responsibility, customizable	Shared responsibility, standardized by provider
Accessibility	**Limited, network-dependent**	Enhanced, provider ensures uptime and accessibility	Internal access, enhanced through virtualization	Flexible access, dependent on network setup	Broad access, internet-dependent
Disaster Recovery	**On-site or off-site backups**	Provider-managed, often cloud-based backups	On-site or off-site managed	Combination, flexible to needs	Provider-managed, cloud-based
Maintenance	**In-house or managed by third parties**	Fully managed by provider, regular updates and upgrades	In-house or managed, depending on setup	Combination, less burden on organization	Provider-managed, minimal in-house effort

Weighing Between Managed and Non-Managed Options

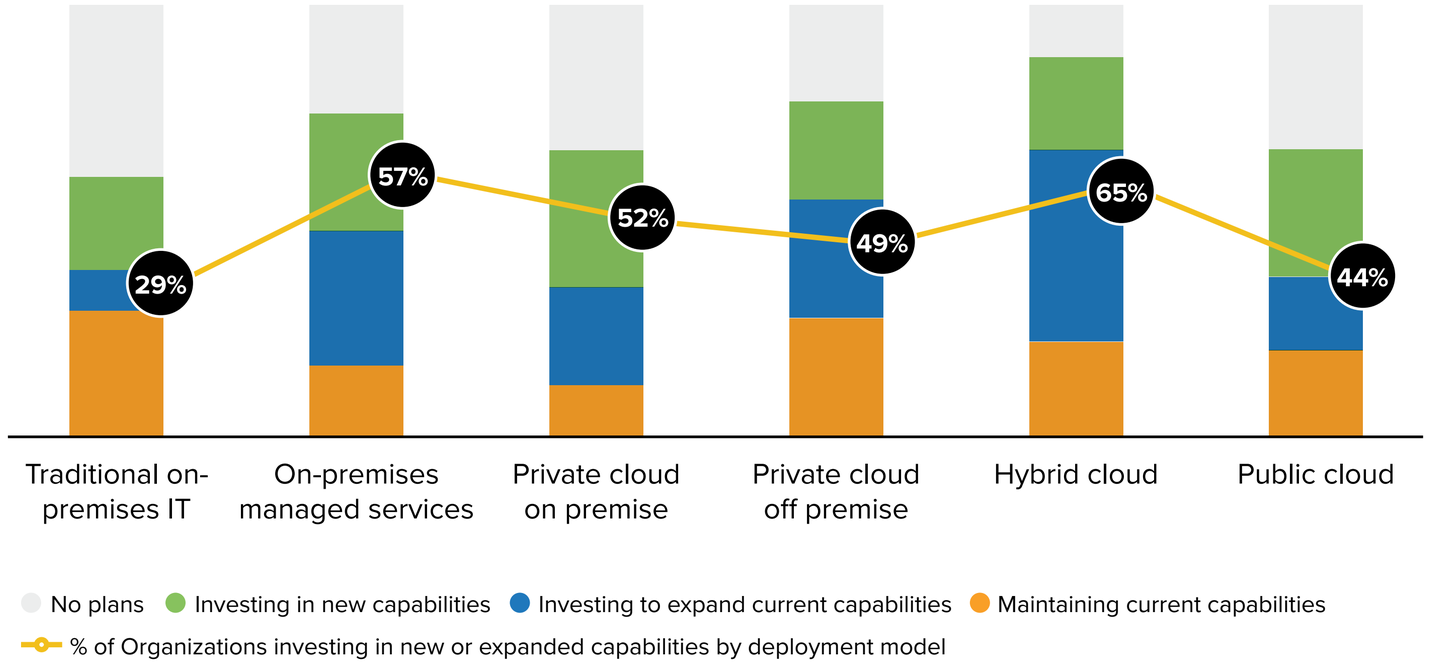
Managed services offer a valuable option for Enterprise Medical Imaging. By outsourcing infrastructure, security, and support, healthcare organizations can focus on core clinical and operational tasks. This accelerates time-to-value and reduces risks. Consumption-based pricing aligns resources with business needs, improving efficiency and cost predictability.

Feature	Non-Managed	Managed
Infrastructure Management	Client-managed	Provider-managed
Expertise	Client-supplied	Provider-supplied
Cost Model	Pay-as-you-go or upfront	Subscription-based
Time-to-Go-Live	Longer deployment	Faster deployment
Security	Shared responsibility	Robust security measures
Scalability	Manual scaling	Automatic scaling
Updates	Manual updates	Automatic updates
Support	Limited support	24/7 support
Customization	High flexibility in customization	Standardized customization options

European healthcare providers are investing in a mix of deployment models

To balance health data compliance requirements, such as data residency, with access to new capabilities, European healthcare providers are adopting a wide range of IT deployment models.

Investments in hybrid cloud continue to expand and managed services model across on-premise and cloud environments are driving new investments.



(Source: IDC Health Insights European Healthcare Survey, IDC 2024)

Cloud-SaaS Convergence Offers A Compelling Alternative To Break Free From Legacy Systems

On-premises Enterprise Medical Imaging is becoming expensive and complex. Cloud and SaaS solutions offer better cost control and simplified operations by consolidating data and improving access. SaaS solutions also enable simpler growth through expansion and pave the way for easier adoption of new innovations. This leads to better collaboration, decision-making, and patient care.

Cloud can enhance and optimize the top three functionalities deemed most important (top 3) by European healthcare organizations for their medical imaging strategies:

35%

Patient-centric care and data sharing

27%

Robust storage management

24%

Efficient data lifecycle management

SaaS Is Undeniably Emerging As The Preferred Cloud Deployment Model Within European Healthcare

SaaS's popularity stems from its ability to leverage public cloud benefits without the operational overhead. By simplifying infrastructure, SaaS helps healthcare organizations speed up digital initiatives and reduce management burdens.

71% of European healthcare providers use or plan to use SaaS as a key cloud deployment option.

(Source: IDC Health Insights European Healthcare Survey, IDC 2024)

Key Considerations for Cloud Enterprise Medical Imaging

1

Prioritize the Cloud

Healthcare organizations must expedite the migration of medical imaging data and applications to Cloud Enterprise Medical Imaging networks. This strategic move is essential for unlocking the full potential of advanced technologies like AI and analytics.

2

Optimize Workflows and User Experience

To maximize the value of Cloud Enterprise Medical Imaging, healthcare providers should focus on streamlining workflows and creating intuitive user interfaces. This will enhance efficiency, reduce errors, and help reduce healthcare professional burnout, improving overall clinician satisfaction.

3

Integrate with Broader Technology and Digital Initiatives

Cloud Enterprise Medical Imaging should be a cornerstone of larger health strategies, such as command centers and digital front doors. By centralizing image management and facilitating real-time collaboration, cloud platforms can significantly enhance these initiatives.

4

Strengthen Data Security and Compliance

Protecting patient data is paramount. Healthcare organizations must invest in robust security measures and ensure adherence to regulations like GDPR, NIS2, UK National Cyber Security Centre's Cyber Assessment Framework (CAF) . Cloud Enterprise Medical Imaging platforms that prioritize data privacy and security are essential for mitigating risks.

5

Redefine Health Governance and Redesign Reading Operations

Healthcare provider organizations should focus on redefining health governance to support both organic and inorganic growth. This includes redesigning reading operations to enhance efficiency, collaboration, and scalability. By aligning governance strategies with Cloud Enterprise Medical Imaging, organizations can better manage growth and optimize their imaging services.

About the Analysts

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Silvia leads the team of analysts covering the European healthcare market and the Worldwide Medical Devices Industry. Her research offers strategic guidance to end users and vendors in healthcare and life sciences, helping organizations navigate how technologies are disrupting traditional business and care models. Her comprehensive analysis explores foundational elements shaping the health industry's evolution, including key trends like evidence-based medicine, personalized care, and the integration of services. Through these themes, she examines ongoing innovations and best practices in critical technological areas such as AI, IoMT, cloud computing, and next generation clinical information systems.

More about Silvia Piai

AGFA HealthCare Enterprise Imaging Cloud

Scale as you go. Experience carefree operations.

Enterprise Imaging Cloud is AGFA HealthCare's SaaS solution that provides seamless updates, effortless scalability, and enhanced security, all while having better cost control, so you can focus on what truly matters – **Patient Care.**

It provides you all the benefits, capabilities and opportunities of the Enterprise Imaging platform, combined with the advantages of a hands-free fully managed SaaS solution on the Cloud.

Experience a world where technology is not a bother, but a boost.

Learn more about AGFA HealthCare Enterprise Imaging Cloud

Enterprise Imaging Cloud offers to IT Leadership

We empower you and your IT team to spend less time on low-impact tasks, and more time on achieving your growth objectives. AGFA HealthCare EI Cloud utilizing our cloud-native architecture enables true SaaS and boosts managed services while delivering capabilities and confidence. Experience a world where technology is not a bother, but a boost.

- Scale on-demand
- Continuous delivery and deployment
- SaaS enabled, fully managed services
- Efficient IT resources management
- Better operating cost control
- Reliability, availability, and resilience
- Managed security
- Maximized performance
- Peace of mind, quick, easy upgrades for always up-to-date software means no risk of falling behind
- Happy, productive clinicians

That's life in flow.

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