AGFA HealthCare

Guide #2

Implementing Enterprise Imaging in the Cloud

5 Strategic Considerations for a Successful Implementation

That's life in **flow.**

The journey to the cloud doesn't end with selecting your Enterprise Imaging (EI) partner. In many ways, it's just beginning.

Deploying a cloud-hosted EI solution requires just as much care and strategic foresight as the selection process. Cloud implementation is a transformation - one that touches clinical workflows, IT operations, infrastructure management, and budgeting models.

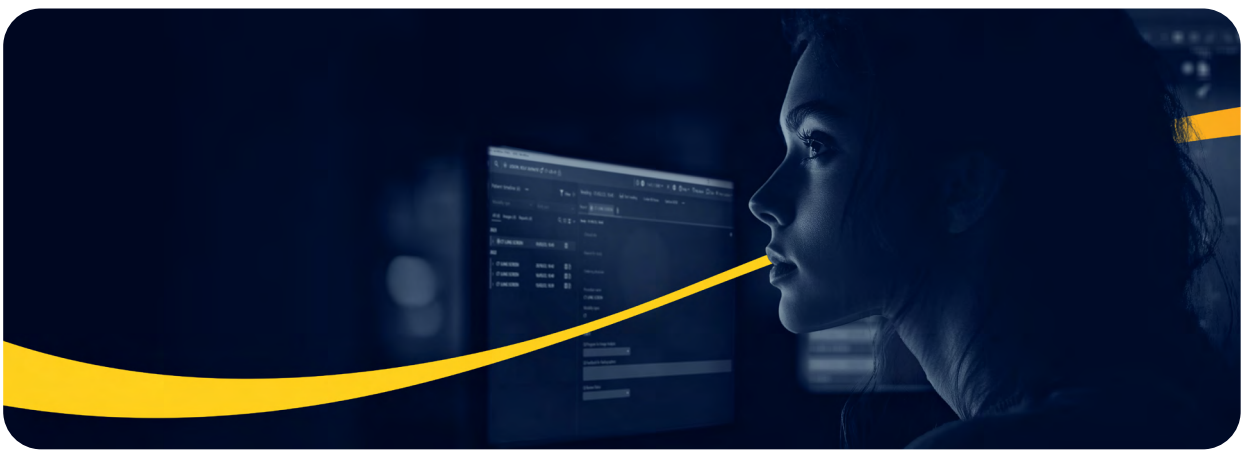
Where the previous guide, *"Purchasing a Cloud-Hosted Enterprise Imaging Solution"*, discussed key considerations for selecting a cloud partner, this next guide provides practical guidance for healthcare organizations preparing to implement a cloud-based EI platform, and outlines strategies and tactics for achieving a seamless and value-driven deployment.

1 Defining a Cloud Transition Strategy

Data migration is often the first thing that comes to mind when planning a move to the cloud. However, before any data is transferred it's critical to establish a clear, organization-wide transition strategy. This strategy aligns your cloud implementation with your clinical, operational, and financial goals - better positioning you to take full advantage of what cloud has to offer.

This starts with re-evaluating your enterprise imaging priorities. In an on-premises environment, the focus may have been on managing storage capacity, hardware performance, and uptime. In a cloud context, those priorities shift:

- Network bandwidth, redundancy, and viewer responsiveness become key performance concerns.
- Egress becomes an architectural consideration, especially when priors are accessed frequently or data is moved in bulk. Financially, if not adequately included in your subscription cost up-front, it can also result in unexpected fees.
- Data lifecycle rules and archive strategy become essential for cost management, including considerations for cold storage and defining what legacy data to migrate versus archive.



Just as importantly, clinical workflows must be re-examined and optimized for a SaaS-enabled environment. Cloud is not just a hosting model, it's a chance to modernize workflows, eliminate inefficiencies, and re-align processes to current and future needs, which often involves streamlining steps, automating manual tasks, and leveraging cloud capabilities to enable more flexible, scalable, and collaborative care delivery models. Start by conducting a detailed audit of your existing workflows:

- Map processes across subspecialties like radiology, cardiology, and point-of-care ultrasound (POCUS).
- Identify legacy workarounds, manual tasks, and integration dependencies.
- Pinpoint opportunities where legacy applications created siloing that could be eliminated by "anywhere-anytime" imaging acquisition and access.
- Evaluate how key activities like prior image retrieval, reporting, and communication will behave in the cloud.

Next, take stock of your broader imaging ecosystem. Many departments still depend on systems that are not cloud-native, such as the EHR, dictation, scheduling, advanced visualization, or specialized devices. Transitioning to cloud introduces new requirements for web-based standards (e.g., DICOMweb and FHIR) and APIs. Imaging data may need to traverse both cloud and on-premises environments, raising questions about latency, security, and reliability. For this reason, hybrid environments are an inevitable part of the cloud transition. As you build your strategy, account for:

- Middleware or routing tools to bridge gaps between systems.
- Staging areas for components not yet cloud-ready.
- Contingency plans for mission-critical workflows like diagnostic reporting.

A strong cloud partner will help you modernize - not just migrate - by supporting workflow redesign, cost-performance optimization, and a roadmap for evolving your imaging environment as more systems become cloud-enabled over time.

2 Migrating your Data to the Cloud

Cloud migration involves so much more than just moving data. Imaging systems are tightly interwoven with clinical care, and your migration must be planned accordingly to minimize disruption and maximize value. Core considerations include:

- **Strategic Migration Planning:**
  One of cloud's greatest strengths is speed to value, however bulk data migrations can slow you down. Look for migration tools that support dynamic, intelligent data transfer. Prioritize relevant priors for comparative reads using registration or order events, and offer ad-hoc access to source systems as needed during transition.
- **Think Beyond Imaging Data:**
  Plan for the migration of critical associated information such as image markups, annotations, and diagnostic reports to preserve the complete clinical context in the cloud environment.
- **Data Retention Strategy:**
  You don't need to migrate everything. Define rules for what to move (e.g., 7-10 years of imaging, non-deceased patients, etc.), and plan for how to handle older studies. Incorporate Information Lifecycle Management (ILM) automation to tier storage effectively or transition low-value data to offline or cold storage.
- **Cost Management and Retention Policies:**
  Avoid unnecessary cloud costs by building retention and migration policies that balance performance, accessibility, and cost. Use granular migration rules and tiering strategies to control spend without compromising care quality.

By keeping the focus on clinical continuity and strategic enablement, rather than just data logistics, you can set your organization up for long-term success in the cloud.

3 Decommissioning On-Premises Infrastructure

Infrastructure decommissioning is often an afterthought in cloud migration projects, but taking a proactive approach can help you realize the full value of your cloud investment while avoiding unnecessary complexity, redundant costs, and service disruptions.

Ultimately, there are 2 options - retirement and repurposing. Each approach comes with unique considerations:

Retirement

Phasing out and eliminating on-premises hardware can have an immediate impact on your bottom line by eliminating associated maintenance and licensing costs, while shifting resource burdens from internal IT teams to your cloud SaaS partner. However, risks include:

- Potential gaps in historical data access if migration is incomplete or delayed.
- User resistance if new workflows feel unfamiliar.
- Unanticipated dependencies on local services (e.g., background jobs, audit logs).

If retiring legacy hardware, include a grace period with dual-system operation, where appropriate, to support user training, workflow validation, and backup access.

Repurposing

Rather than discarding functional hardware, you may wish to repurpose it for alternative use cases, such as:

- Disaster recovery or business continuity.
- Training or test environments.
- Setting up AI or analytics sandboxes.
- Building cloud extension labs to simulate hybrid workflows pre-go-live.

This allows you to increase ROI from former capital investments and augment your EI program with value-adding extensions.

Create a Decommissioning Readiness Checklist

Regardless of which option you choose, infrastructure decommissioning plans should be directly tied to data migration progress and workflow cutovers. To support a smooth transition, create a decommissioning readiness checklist that is aligned to each phase of your migration plan to make sure systems are retired only when ready, and all necessary contingencies are in place.

Ultimately, your cloud partner should work with you to assess what can be safely retired and when, identify interim or long-term value in repurposed assets, and develop a roadmap for progressive infrastructure optimization to set your cloud transition up for long-term success.

4 Preparing for the Operational & Cultural Shift

When in the midst of a cloud transition the primary focus often falls on technical aspects. However, the operational and cultural changes it introduces are equally important but often overlooked. Success with a cloud SaaS model depends not only on technical readiness but also on the adaptability of your teams and the clarity of your operating model.

Transitioning EI to the cloud is a fundamental shift in how healthcare organizations operate, allocate resources, and think about system ownership and control. Particularly for IT and administrative users, internal teams must redefine their roles and realign expectations as legacy systems are phased out and replaced with partner-managed cloud platforms.

Redefining Roles

Traditional imaging IT teams are used to owning and managing infrastructure end-to-end. In a SaaS model, many of these responsibilities shift to your cloud partner who should assign a Technical Account or Customer Success Manager to help steward you through this process. This shift enables internal teams to:

- Focus on workflow design and governance rather than system maintenance.
- Take on strategic orchestration roles and aligning enterprise imaging with broader clinical and operational goals.
- Partner on continuous optimization and user adoption, rather than break/fix support.
- Shift focus from hardware management to ensuring resilient last-mile internet connectivity, managing firewalls/NAT, enterprise load balancing, centralized identity management, and DNS security.
- Engage with their assigned account manager to effectively manage the SaaS relationship and optimize service delivery.

Acknowledging this shift early and preparing teams through role clarity, training, and communication is key to a smooth transition.

Adopting New Support Models

In a SaaS model support responsibilities also change significantly. With the cloud partner responsible for system uptime and performance, organizations must adapt their internal escalation and communication processes:

- Establish clearly defined escalation paths and response time expectations.
- Create new workflows for triaging and communicating issues to your cloud partner.
- Embrace a cultural mindset shift from *“we fix it”* to *“we escalate and track it”*.

To foster long-term success, treat your cloud partner as an extension of your IT team. Regular reviews, performance monitoring, and transparent feedback loops build trust and alignment.

Driving Change Management

Cloud transitions impact not just IT, but clinical and administrative stakeholders as well. It's important to recognize your new, ongoing responsibilities – such as monitoring growth in study sizes or managing prior volumes. Clear, tailored communication about the strategic benefits of SaaS adoption helps build enterprise-wide support.

Benefits to highlight include:

- Predictable costs and simplified budgeting.
- Enhanced scalability to support growth and innovation.
- Reduced IT burden and increased focus on strategic initiatives.
- Better alignment with enterprise modernization efforts.

Tailor messaging to each audience. Radiologists will care most about performance and availability, finance teams want cost visibility, and IT staff need to understand how their responsibilities are evolving.

Ultimately, organizations that embrace the cultural shift alongside the technical transition are better positioned to unlock the full value of cloud enterprise imaging.

5 Preparing for the Financial Transition

While cloud platforms often lead to long-term cost efficiencies, the transition period can introduce new budgetary complexities. Temporary dual-running costs, new accounting categories, and shifts in budgeting paradigms all require careful planning and cross-functional coordination to achieve the best financial outcomes.

CapEx vs. OpEx Budgeting

Traditional imaging systems are capital-intensive, relying on large, upfront investments for software licenses, servers, storage arrays, and infrastructure, which are depreciated over time. The cloud model replaces these with recurring operational expenses: subscription fees, usage-based pricing, and managed service contracts.

This OpEx approach provides more predictability, flexibility, and scalability, but it also demands new internal processes. As a result you may need to:

- Revisit budgeting structures and policies to support subscription-based IT models.
- Align with finance leadership on how cloud services are forecasted, approved, and monitored.
- Adjust budget cycles to incorporate regular reviews of utilization reports and statistics.

Budgeting for Growth and True-Ups

Most cloud pricing models are built around fixed per-study fees, with volume-based true-ups as part of the agreement. Even the best volume forecasts are just that - forecasts. Try to anticipate this, and:

- Expect and plan for true-ups, recognizing that these usually reflect increased study volumes or growing imaging needs - a positive sign of organizational growth.
- View these adjustments not as overages, but as indicators of increased revenue potential and greater return on investment (ROI).
- Perform regular monitoring of actual vs. projected usage to help finance teams plan accordingly and avoid year-end surprises.

Managing the Financial Bridging Period

During migration you may face a temporary but unavoidable overlap in costs:

- Paying for new cloud services while still supporting on-premises hardware and licensing.
- Investing in transition-related resources such as consulting, validation tools, increased bandwidth, and training.
- Accounting for an enablement period that includes onboarding, design, and system configuration, which carries its own cost outside of the recurring subscription fee.

Effective strategies for anticipating and managing these costs include:

- Phased decommissioning of on-premises systems aligned to migration progress.
- Coordination of cloud go-live with budget cycles to reduce overlap.
- ROI modeling that factors in reduced downtime, improved clinician efficiency, and increased agility.

Redefining Total Cost of Ownership (TCO)

It's critical to go beyond a license-for-license comparison when assessing cloud financial impact. A comprehensive view of TCO should include:

- Labor savings from fewer internal upgrades and maintenance tasks.
- Fewer service disruptions from hardware failure or unplanned downtime.
- Security, compliance, and monitoring baked into the cloud partner's subscription costs.
- Cost avoidance from delayed hardware refreshes and eliminated data center spend.

Monitoring and Managing Cloud Costs

One of the key benefits (and challenges) of cloud is elasticity. Usage can ramp up quickly, and costs can follow. Proactive monitoring and cost-control strategies should focus on:

- Annual study volume and average study size (especially as new modalities and protocols are introduced).
- Viewer and application usage patterns that influence license counts.
- Leveraging dynamic storage tiers (e.g., hot, cold, archival) and associated access patterns, where possible.
- Data egress and retrieval behavior, especially in hybrid environments.
- Bulk data retrievals and research initiatives, which may incur costs beyond standard subscription services.

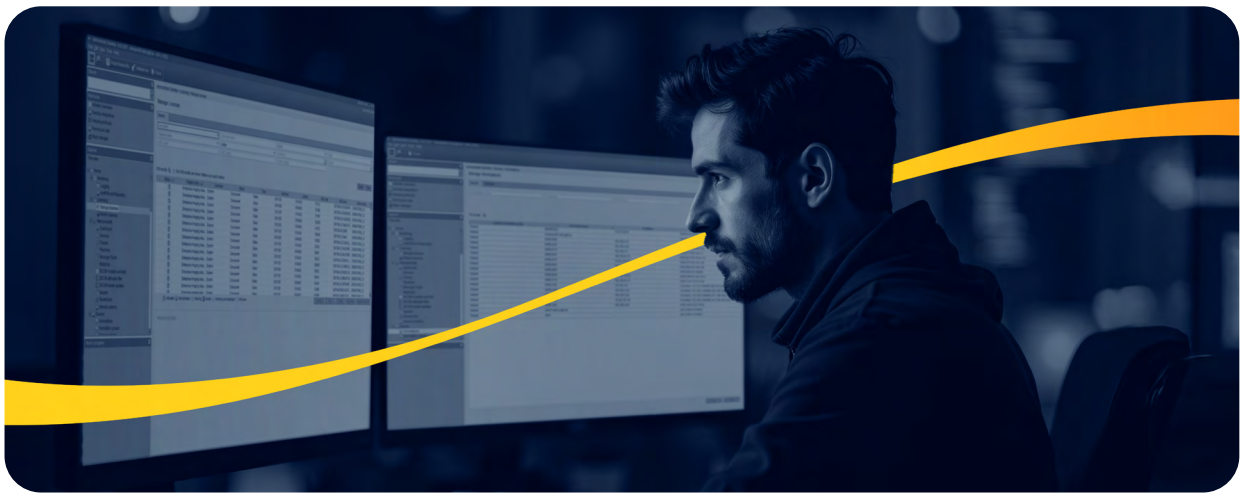
Look to your cloud partner to provide regular budget reporting, cost analytics, and the cadence of volume review to help you identify trends, forecast changes, and implement controls.

Engaging Finance Early and Often

Finance leaders play a vital role in managing the transition successfully, so it's important to loop them into strategic planning early to:

- Understand long-term cloud benefits (e.g., scalability during M&A, agility to support new service lines, etc.).
- Plan for multi-year budget structures that accommodate phased growth.
- Evaluate pricing models - whether per-study, storage-based, or feature-driven - to select what best aligns with projected volume and use cases.

Finally, establish a cross-functional cadence for financial planning that includes IT, clinical operations, finance, and procurement. With the right collaboration and foresight, your organization can confidently navigate the financial complexity of cloud transition and emerge stronger and more agile on the other side.



Charting Your Path to Successful Cloud Implementation

Successfully implementing enterprise imaging in the cloud is a strategic transformation - one that demands clear planning, strong coordination, and the right partner to realize lasting results. It's not just about migrating technology; it's about modernizing workflows, adapting operations, and realizing the full value of your cloud investment.

AGFA HealthCare's Enterprise Imaging Cloud is purpose-built to help healthcare sorganizations achieve a smooth, scalable, and value-driven implementation. With deep experience designing highly effective enterprise imaging infrastructure and workflow, AGFA simplifies complexity and aligns cloud adoption with clinical and operational goals through:

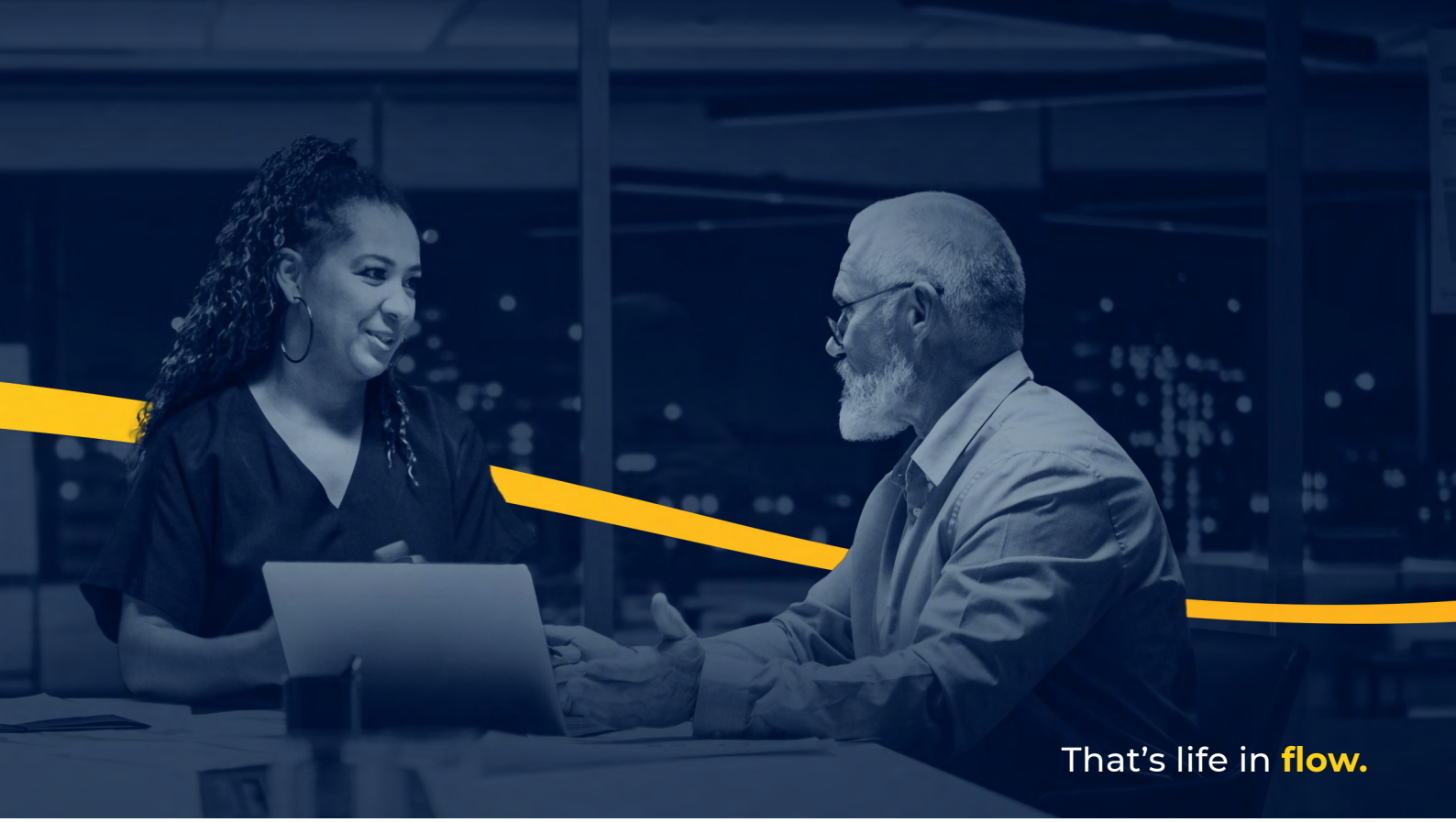
- **Pre-go-live enablement** for a seamless transition.
- **Cloud-optimized performance** through smart data streaming and scalable compute.
- **Predictable costs** using a realistic usage-based model with growth flexibility.
- **Strategic workflow redesign** tailored to your specialties and systems.
- **Support for hybrid environments**, guiding infrastructure retirement and readiness.
- **Comprehensive training** for staff, clinicians, and diagnosticians to increase adoption, accelerate change, and promote operational outcomes.

The cloud is not a one-size-fits-all destination - it's a journey. With AGFA as your partner you can transition to a future-ready platform supported by an experienced team that is dedicated to helping you evolve, scale, and succeed at every phase of your enterprise imaging transformation.

Appendix: Checklist of Enterprise Imaging Cloud Implementation Readiness

Key Question	Main Considerations	Evaluation Criteria
1. Defining a Cloud Transition Strategy	▪ Re-evaluating Enterprise Imaging priorities in a cloud context. ▪ Optimizing clinical workflows for a SaaS environment. ▪ Assessing the broader imaging ecosystem, including non-cloud-native. systems and critical EHR integrations ▪ Evaluating your cloud partner's ability to support cost-performance optimization, and a roadmap for your evolving imaging environment.	▪ Our organization has a clearly defined cloud transition strategy. ▪ Workflow optimization plans are in place, considering both clinical and technical aspects of a SaaS environment. ▪ Our broader imaging ecosystem and integration needs (including EHRs) have been assessed. ▪ Plans for managing hybrid cloud/ on-prem environments have been developed.
2. Migrating Your Data to the Cloud	▪ Planning for strategic and efficient data transfer. ▪ Defining cost-effective data retention and archival strategies. ▪ Evaluating the cloud partner's tools for dynamic, intelligent data transfer and ad-hoc access during transition.	▪ A strategic data migration plan is established, prioritizing clinical continuity and value. ▪ Data retention and cost management policies are defined and integrated into the migration strategy. ▪ Our cloud partner's migration capabilities are assessed for efficiency and support.
3. Decommissioning On-Premises Infrastructure	▪ Deciding between retiring or repurposing legacy hardware. ▪ Mitigating risks for retirement (e.g. historical data access gaps, user resistance, etc.). ▪ Aligning decommissioning with migration and cutovers. ▪ Evaluating the cloud partner's ability to support assessing what can be safely retired, identifying value in repurposed assets, and developing an optimization roadmap.	▪ A clear strategy for decommissioning (retirement or repurposing) on-premises infrastructure is in place. ▪ A decommissioning readiness checklist has been developed. ▪ Decommissioning plans are aligned with data migration and workflow cutover timelines. ▪ Our cloud partner is aligned and prepared to support our decommissioning strategy.

Key Question	Main Considerations	Evaluation Criteria
4. Preparing for the Operational & Cultural Shift	▪ Understand operational and cultural impact, especially on administrative and IT teams. ▪ Redefine internal team roles and responsibilities, shifting focus to network infrastructure and performance. ▪ Clarify engagement with cloud partner roles (e.g., TAM/CSM) and new support models. ▪ Drive change management through tailored communication and acknowledging new responsibilities.	▪ The operational and cultural implications of the cloud transition across clinical, administrative, and IT stakeholders are understood. ▪ New roles and support models for internal teams are defined and communicated. ▪ A comprehensive change management strategy is being implemented across the organization. ▪ The cloud partner's role in supporting operational and cultural shifts is clearly defined.
5. Preparing for the Financial Transition	▪ Adjust to OpEx budgeting models and plan for growth/true-ups. ▪ Manage temporary overlapping costs during transition. ▪ Redefine Total Cost of Ownership (TCO) in a subscription model. ▪ Ability to monitor cloud costs (study volume, usage, tiers, egress, special initiatives) to engage finance early.	▪ Budgeting structures are updated for OpEx models, and growth/true-up scenarios are planned for. ▪ The financial bridging period costs are anticipated and managed. ▪ A comprehensive TCO model, beyond license comparisons, is developed and validated. ▪ Proactive cloud cost monitoring strategies are established and managed with the cloud partner. ▪ Finance leadership is actively engaged in all phases of the transition.



Accelerate Your Health System Growth with AGFA HealthCare's Enterprise Imaging Cloud.

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Guide #3 coming soon:
"How to Optimize Enterprise Imaging in the Cloud"

AGFA HealthCare