LEVERAGING MANAGED SERVICES IN ENTERPRISE IMAGING FOR A FUTURE-PROOF STRATEGY

FROST & SULLIVAN EBOOK
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KEY TRENDS SHAKING UP PROVIDER ORGANIZATIONS IN IMAGING

- **TREND**: CHANGING PROVIDER LANDSCAPE, INCLUDING LARGER HEALTH SYSTEMS, M&A AND CONSOLIDATION OF ORGANIZATIONS.
- **REQUIREMENTS**: A strategy to consolidate disparate IT systems on a single enterprise platform to integrate diverse patient information from distinct clinical repositories.

- **TREND**: GREATER PROVIDER FOCUS ON OUTCOMES AND EFFICIENCY.
- **REQUIREMENTS**: Automation and simplification of workflow to enable more time spent with patients and on patient care.

- **TREND**: MAINTAINING OPTIMAL LEVEL OF CARE WHEN STRESSED TO CAPACITY.
- **REQUIREMENTS**: Desires for remote and managed services solutions for flexible and preventive approaches to IT.

- **TREND**: CONTINUED GROWTH AND EXPANSION OF HEALTHCARE DATA.
- **REQUIREMENTS**: Secure and scalable storage, enterprise approach, fast and flexible access to applications and analytics.

In the evolving environment, provider organizations desire to focus on **WHAT THESE CHANGES MEAN TO THEM IN ENHANCING PATIENT CARE** versus dealing with issues such as their IT stack in their digital journey.

Source: Frost & Sullivan.
Leveraging Managed Services in Enterprise Imaging for a Future-proof Strategy

CREATING A COMPLETE VIEW OF THE PATIENT

Lack of a unified platform complicates many objectives of providers today including optimal clinical decision making and patient outcomes.

In many healthcare organizations, imaging data is stored in silos tethered to individual imaging archives. Traditional PACS approaches are challenged, with the expansion of imaging specialties, in dealing with workflow and storage within the enterprise, as well as interoperability between different imaging and health IT systems.

New tech is producing larger and more complex imaging datasets, including both DICOM and non-DICOM data, making it more complex and difficult to store and distribute imaging content across the enterprise.

By harmonizing imaging, reports, and medical records, providers can create a longitudinal health record ACCESSIBLE VIRTUALLY ANYTIME, ANYWHERE ACROSS THE ENTERPRISE, creating a complete 360 degree view of the patient.
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**WHAT HAS GONE WRONG IN ENTERPRISE IMAGING?**

**POOR PRODUCT SELECTION**
A product is selected which cannot handle all content and present it in a universal way. Such as attempting to use an ECM system designed to reduce or replace paper for true enterprise imaging which focuses on DICOM and non-DICOM images. Or choosing a PACS viewer as an enterprise viewer with tools designed for a radiologist and not all potential users.

**LACK OF SCALEABILITY**
Implementing a system which doesn’t have the right scalability once leveraged in real-world delivery of care. Discovering that it is not easy to add on new service lines, sites, practices without significant architectural changes and support from the vendor.

**NOT STANDARDS-BASED**
Not having an approach which is standards based, thereby lacking optimal interoperability and imaging exchange capabilities, and information access regardless of file format.

**USING MULTIPLE SUPPLIERS**
Going with multi-supplier approach for an Enterprise Imaging (El) system via point solutions versus a single supplier—results in user, IT system and cost problems versus a single-sourced solution.

**CLOUD-SHIFT MISSTEPS**
Misjudging the complexity of moving to the cloud before a solid enterprise imaging strategy has been developed, which makes the shift more efficient given the cohesive data strategy in EI.

**WRONG TIMING ON GOVERNANCE**
Not dealing with Governance early means the groundwork has not been done to create the right collaborative framework and roadmap amongst clinical and non-clinical staff to drive success in an EI process initiative and implementation.

The complexity of on boarding an enterprise imaging system is a big part of why **HEALTHCARE PROVIDERS ARE HESITANT**, despite being sold on the benefits of improved clinical outcomes.

Source: Frost & Sullivan.
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Future-proof your Enterprise Imaging Strategy

- Work with solution provider with expertise across the Enterprise Imaging paradigm vs. at a module level.
- Institutions have to plan for exponential increase in storage requirements as more 'ologies' become Enterprise Imaging-ready.
- The design philosophy should consider the future plug-in of clinical and operational analytics applications.
- Enterprise Imaging platform should be AI-ready and should be able to embed a large number of AI algorithms in the workflow with minimal intervention and disruption.
- Leverage a platform which will work with specialized departmental workflow and visualization solutions if required, while centrally storing the content.

A complete Enterprise Imaging strategy provides a SINGLE SOURCE OF TRUTH without the challenges of siloed data.

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Cloud offers certain distinct advantages as compared to an on-premise model. Cloud enables as-a-service models wherein the customer pays for every instance of service usage indicating a truly operational expense model given they do not invest in/own any infrastructure. It frees the client from the responsibility of maintaining and servicing the physical infrastructure. Cloud also offers the advantage of elasticity that enables organizations to rapidly scale-up and scale-down operations and pay only for what services are consumed.

“as-a-SERVICE” VS ON-PREMISE MODEL

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<thead>
<tr>
<th></th>
<th>SaaS (Cloud-based)</th>
<th>On-premise</th>
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<tbody>
<tr>
<td>Expenditure visibility</td>
<td>Strong</td>
<td>Weak</td>
</tr>
<tr>
<td>Client-vendor relationship</td>
<td>Strong</td>
<td>Weak</td>
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<tr>
<td>Financial efficiency</td>
<td>Strong</td>
<td>Weak</td>
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<tr>
<td>Operation efficiency</td>
<td>Strong</td>
<td>Weak</td>
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<tr>
<td>KPIs monitoring</td>
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Source: Frost & Sullivan.
ENTERPRISE IMAGING AND THE CLOUD

Optimal pathway for provider organizations to be best prepared for the future.

Cloud-based Enterprise Imaging (EI) Benefit Examples:

- A cloud-based EI solution enables high availability, and an efficient back-up and disaster recovery strategy for business continuity.

- A cloud-based EI solution enables providers to best leverage artificial intelligence and analytics capabilities which are increasingly important as healthcare’s digital data expansion and progression continues.

- A cloud-based, collaborative platform increases clinician and patient digital engagement, ensures secure healthcare communication, reduces referral time, and avoids unnecessary patient transfers.

- Zero footprint, web based viewing allows for mobility and anytime, anywhere access, overcoming geographic limitations.

- A cloud-based Enterprise Imaging platform, equipped with data security, compliance monitoring tools, and digital dashboards for compliance visualization can help organizations comply with medical imaging data retention policies and guidelines to achieve improved healthcare outcomes.

According to Frost & Sullivan research, we are currently in an acceleration phase for adoption of cloud-based imaging informatics and a-a-s models.*

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**STEPS YOU CAN TAKE IN THIS JOURNEY**

**TAKE STOCK** in the various challenges your organization is facing with its current imaging IT strategy.

**CREATE** strategic imperatives where leveraging the cloud and managed services can make a difference in terms of staff satisfaction, technology management, costs, financial goals and outcomes.

**EVALUATE** where you are in the shift to a better enterprise imaging approach.

**ASSESS** what solution may be right for you based on a new approach.

**LEVERAGE** a vendor who has strength in Enterprise Imaging, cloud, security and managed services under the same roof for optimal synergies and expertise to carry your organization forward for best success and results.
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