FROST & SULLIVAN

CHANGE HEALTHCARE

2018 Global Enterprise Imaging Informatics Growth Excellence Leadership Award



2018
BEST PRACTICES
AWARDS

FROST & SULLIVAN

Contents

Background and Company Performance	3
Industry Challenges	3
Growth Performance and Customer Impact of Change Healthcare	3
Conclusion	8
Significance of Growth Excellence Leadership	9
Understanding Growth Excellence Leadership	9
Key Benchmarking Criteria	10
Growth Performance	10
Customer Impact	10
Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices	11
The Intersection between 360-Degree Research and Best Practices Awards	12
Research Methodology	12
About Frost & Sullivan	12

Background and Company Performance

Industry Challenges

Medical imaging operations, traditionally centered on a few core imaging-intensive departments such as radiology and cardiology, are evolving towards comprehensive enterprise imaging strategies. Robust, modular and scalable information technology (IT) solutions are essential to support multi-facility, multi-departmental approaches to image management. For achieving that purpose, a healthcare information infrastructure is often developed gradually by leveraging and extending the existing radiology IT investments and expertise. However, a truly comprehensive solution relies on the enterprise imaging informatics vendor's readiness and ability to deliver flexible and customizable solutions based on a modern and progressive technology stack.

In other words, enterprise imaging requires a vendor capable of combining leading technology and expert service, while positioned to the customer as a partner sharing a joint mission for improving specific outcomes. Hence, vendors need to succeed in addressing both the mature and high-standards market for departmental imaging IT solutions, while also excelling in the constantly evolving enterprise imaging IT market, posing significant challenges. As such, very few vendors can adequately cater to both levels of demand, and even fewer can consistently deliver high-quality solutions in this complex market.

Growth Performance and Customer Impact of Change Healthcare

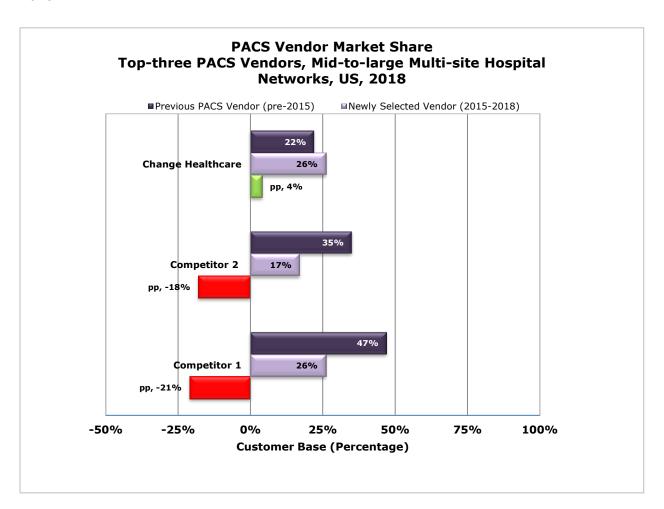
Headquartered in Nashville, Tennessee, Change Healthcare is a leading global healthcare IT vendor. Armed with an industry-leading array of payer and provider health IT products, including best-in-class enterprise imaging solutions, the company has experienced tremendous growth momentum over the last several years amidst a changing healthcare environment. Its focus on IT and professional services enables the company to take a customer-centric, consultative problem-solving approach designed to help organizations improve their financial, clinical and operational outcomes.

Capturing Above-market Growth

A 2018 Frost & Sullivan survey of 78 medical imaging IT decision-makers in mid-to-large multi-site United States (US) hospital networks reveals market adoption trends that bode extremely well for Change Healthcare. In the core radiology PACS segment, a highly competitive, replacement-only market, the company stands out amongst competitors as the only leading vendor that gained market share since 2014. This achievement is highly significant for enterprise imaging, given that the radiology IT foundation serves as a platform for enterprise imaging expansion.

As shown in Figure 1, Change Healthcare's radiology PACS market share increased considerably in the highly coveted, large-scale provider segment over the last three years. This market performance is very significant at a time when imaging enterprises are consolidating their imaging IT solutions as well as vendors. Not only did the company succeed in maintaining its 22% customer share where it was one of the incumbent vendors prior to 2015, but it further grew this share to 26% as of 2018. Frost & Sullivan surmises that Change Healthcare is the preferred vendor for large-scale PACS replacements post-consolidation. As revealed in Figure 1, the two leading vendors prior to 2015 experienced steady declines over the past three years, losing up to half of their market share.

Figure 1. US market share of leading radiology PACS vendors, pre-2015 and 2015 through 2018

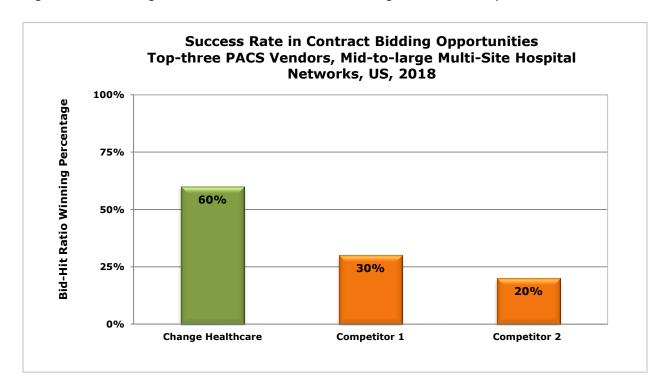


Customer-centric, Consultative Approach

In other related Frost & Sullivan survey findings, hospital networks bidding for a replacement PACS system are most likely to select Change Healthcare when the vendor is taking part in the tendering. Indeed, 60% of prospective customers who call for bids from various IT vendors ultimately award the contract to Change Healthcare.

In comparison, the conversion rates of the other two top PACS vendors are merely 30% and 20%, which indicates Change Healthcare is enjoying better than twice the success rate of its closest competitors. These figures are a testament to the company's customer-first strategy. Through every competitive bidding process that it decides to enter, Change Healthcare designs optimal customer solutions, at the right price.

Figure 2. Percentage of won PACS contracts in 78 large-scale US hospital networks

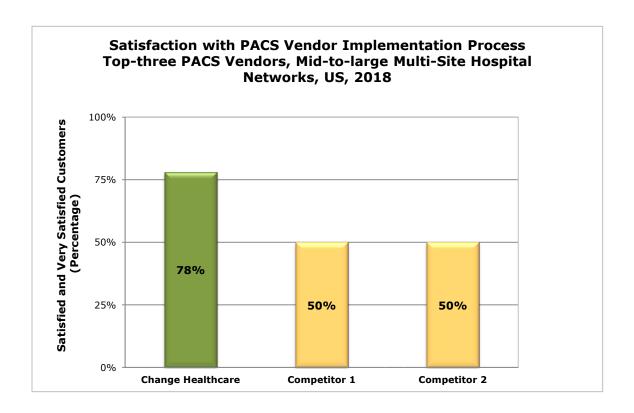


Enhanced Customer Service Strategy

Solution implementation is an extremely sensitive and pivotal stage in PACS replacement and enterprise imaging strategy deployment, particularly in larger-scale organizations. Minimizing disruption and keeping the project on-track and on-budget are critical elements to the internal perception of the vendor and the future success of the contract. Indeed, ensuring a streamlined and seamless system replacement and rollout experience for customers serves to maximize the buy-in of various stakeholders to the new system after the go-live event.

This is not a trivial problem to solve. At a time when several high-profile vendors are having difficulty implementing their enterprise imaging contracts, Frost & Sullivan's 2018 survey indicates that Change Healthcare's customers have significantly higher overall satisfaction ratings with their imaging implementation process compared to its two main competitors (78% versus 50% satisfied or very satisfied, respectively). These ratings exemplify Change Healthcare's "roll-up-your-sleeves" attitude for providing superior professional service delivery and quality and demonstrating a deep commitment to every customer's success.

Figure 3. Customer satisfaction with the top-three PACS vendor implementation



The same survey shows that Change Healthcare maintains highly-satisfied customers through the system's lifecycle. Approximately 94% of its customers rate their overall experience with the company as highly positive or positive (Figure 4); considerably higher than the respective 81% and 75% ratings of its top two competitors.

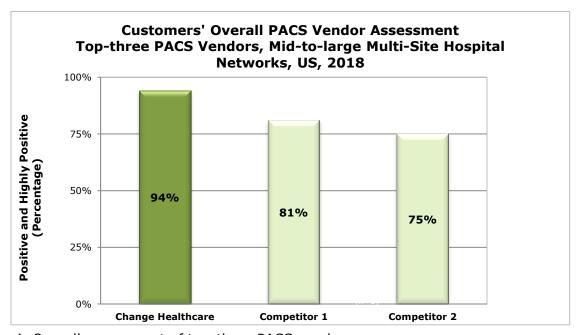


Figure 4. Overall assessment of top-three PACS vendors

These findings go a long way in illustrating the net effect of combining state-of-the-art enterprise imaging technology, superior consulting skills, and leading after-sale service under the Change Healthcare brand. In fact, as healthcare providers keep consolidating; the key to continued vendor success is the ability to evolve and improve alongside customers.

Conclusion

A solid radiology informatics foundation is the cornerstone of a successful enterprise imaging strategy. Change Healthcare is leading the way in the radiology PACS replacement market, delivering the next generation of image, information management, and workflow solutions needed to support the growth of increasingly complex and diversified imaging enterprises. The ongoing consolidation of these enterprises into everlarger multi-facility networks demands a committed, solutions-oriented imaging information technology partner such as Change Healthcare.

With its strong overall performance, Change Healthcare earns Frost & Sullivan's 2018 Global Growth Excellence Leadership Award in the enterprise imaging informatics market.

Significance of Growth Excellence Leadership

Growth Excellence Leadership is about inspiring customers to purchase from your company, and then to return time and again. In a sense, then, everything is truly about the customer, and making those customers happy is the cornerstone of any long-term successful growth strategy. Companies that excel in driving growth strive to be best-inclass in three key areas: meeting customer demand, fostering brand loyalty, and carving out a unique, sustainable market niche.



Understanding Growth Excellence Leadership

Companies that creatively and profitably deliver value to customers ultimately set up their businesses for long-term, rapid growth. This is what Growth Excellence Leadership is all about: growth through customer focus, fostering a virtuous cycle of improvement and success.

Key Benchmarking Criteria

For the Growth Excellence Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Growth Performance and Customer Impact—according to the criteria identified below.

Growth Performance

Criterion 1: Growth Strategy

Requirement: Executive team has a shared vision for the organization's future growth and has created and implemented a strategy that is consistent with that vision.

Criterion 2: Above-market Growth

Requirement: Company's growth rate exceeds the industry's year-over-year growth rate.

Criterion 3: Share of Wallet

Requirement: Customers allocate a greater percentage of their total spend to purchasing products or services produced by the company.

Criterion 4: Growth Diversification

Requirements: Company is equally able to pursue organic (e.g., distribution channel optimization, new product innovation) or inorganic (e.g., acquisitions, partnerships) growth opportunities consistent with the long-term objectives of the organization.

Criterion 5: Growth Sustainability

Requirement: Company has consistently sought out opportunities for new growth, enabling the organization to build on its base and sustain growth over the long-term.

Customer Impact

Criterion 1: Price/Performance Value

Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience

Requirement: Customers feel they are buying the most optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience

Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.

Criterion 4: Customer Service Experience

Requirement: Customer service is accessible, fast, stress-free, and of high quality.

Criterion 5: Brand Equity

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate Award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

STEP		OBJECTIVE	KEY ACTIVITIES	ОИТРИТ
1	Monitor, target, and screen	Identify Award recipient candidates from around the globe	 Conduct in-depth industry research Identify emerging sectors Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice criteria
2	Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	 Interview thought leaders and industry practitioners Assess candidates' fit with best-practice criteria Rank all candidates 	Matrix positioning of all candidates' performance relative to one another
3	Invite thought leadership in best practices	Perform in-depth examination of all candidates	 Confirm best-practice criteria Examine eligibility of all candidates Identify any information gaps 	Detailed profiles of all ranked candidates
4	Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	Brainstorm ranking options Invite multiple perspectives on candidates' performance Update candidate profiles	Final prioritization of all eligible candidates and companion best-practice positioning paper
5	Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	Share findingsStrengthen cases for candidate eligibilityPrioritize candidates	Refined list of prioritized Award candidates
6	Conduct global industry review	Build consensus on Award candidates' eligibility	 Hold global team meeting to review all candidates Pressure-test fit with criteria Confirm inclusion of all eligible candidates 	Final list of eligible Award candidates, representing success stories worldwide
7	Perform quality check	Develop official Award consideration materials	Perform final performance benchmarking activitiesWrite nominationsPerform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	Reconnect with panel of industry experts	Finalize the selection of the best-practice Award recipient	Review analysis with panelBuild consensusSelect recipient	Decision on which company performs best against all best-practice criteria
9	Communicate recognition	Inform Award recipient of Award recognition	 Present Award to the CEO Inspire the organization for continued success Celebrate the recipient's performance 	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10	Take strategic action	Upon licensing, company is able to share Award news with stakeholders and customers	 Coordinate media outreach Design a marketing plan Assess Award's role in future strategic planning 	Widespread awareness of recipient's Award status among investors, media personnel, and employees



The Intersection between 360-Degree Research and Best **Practices Awards**

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform benchmarking industry



participants and for identifying those performing at best-in-class levels.

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages more than 50 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.