



COMPANY OF THE YEAR ASSESSMENT:

*Amplifying the Value of Medical Imaging Services to the Enterprise through Efficient Workflow Solutions*

**TABLE OF CONTENTS**

**SIGNIFICANCE OF THE COMPANY OF THE YEAR AWARD** .....3

**Key Industry Challenges Addressed by McKesson Technology Solutions** ..... 3

Improving and Demonstrating Value in Medical Imaging: A Critical Success Factor ..... 3

Imaging Informatics Workflow Solutions:From Current Deadlock to New Impetus.....4

**BEST PRACTICE AWARD ANALYSIS FOR McKESSON TECHNOLOGY SOLUTIONS** ..... 4

**Key Performance Drivers for McKesson Technology Solutions** ..... 5

Growth Strategy Excellence.....5

Growth Implementation Excellence.....6

Degree of Innovation with Products and Technologies.....6

Leadership in Customer Value.....7

Leadership in Market Penetration.....7

**CONCLUSION** ..... 8

## SIGNIFICANCE OF THE COMPANY OF THE YEAR AWARD

Demand generation, brand development, and competitive positioning all play a critical role in delivering unique value to customers. These areas serve as the foundation of a company's future success and prepare it to deliver on the two criteria that define the Company of the Year Award: Customer Value Excellence and Visionary Innovation. This three-fold focus, however, is only the beginning of the journey and must be complemented by an equally rigorous focus on the customer experience.

Best-practice organizations therefore commit to the customer at each stage of the buying cycle and continue to nurture the relationship once the customer has made a purchase. To accomplish this goal, successful organizations never stop innovating around their products, their service model, or their marketing. Creativity brings about customer value excellence, and customer value excellence reinforces the spirit of creativity.

To achieve and sustain such a standard is a rare and significant accomplishment, and that is why Frost & Sullivan celebrates it with the Company of the Year award. Recipients of this award represent the top 10 percent of their industry: the other 90 percent just can't keep up. To win an award like Company of the Year is to be recognized as a leader not only in the industry, but among non-industry peers as well.

### Key Industry Challenges Addressed by McKesson Technology Solutions

#### Improving and Demonstrating Value in Medical Imaging: A Critical Success Factor

The main mandate of the ongoing reform of the U.S. healthcare system calls on providers to achieve higher quality of care and patient outcomes, albeit while reducing every possible cost inefficiency in the care cycle. Workflow solutions are ideal tools to help providers to address this pressing mandate, as they contribute effectively to closing the loop on the patient care cycles. In medical imaging, efficient and innovative workflow solutions are the key to optimizing the quality and the value of the medical imaging service line to the healthcare enterprise. As they battle to maintain a high profile with their enterprise customers, and start to compete for their fair share of bundled payments under a fee-for-value payment model, medical imaging providers must continually enhance the value that they bring to the table and be able to clearly demonstrate their higher outcomes.

---

“In medical imaging, efficient and innovative workflow solutions are the key to optimizing the quality and the value of the medical imaging service line to the healthcare enterprise.”

- Nadim Michel Daher

Imaging  
Workflow

Informatics  
Solutions:

### From Current Deadlock to New Impetus

More than two decades ago, the first generation of medical imaging workflow solutions served to support the digitization of medical images and part of the imaging workflow, with the appearance of the first radiology information systems and picture archiving and communication systems (RIS, PACS). The second generation of these systems, which were being deployed in the marketplace throughout the last two decades, has helped providers create important departmental efficiencies in each of the clinical areas that make high use of imaging, such as radiology or cardiology.

As these systems approach the end of their useful life, facilities contemplating their next leap forward have come to realize some major shortcomings of their current systems. One limitation of legacy imaging informatics systems is the management of medical image data and related information as a health care silo – a somewhat rigid, monolithic and closed system that does not provide the complete picture of relevant patient information, is not in a readily deliverable format for its various consumers, and not easily accessible to all its stakeholders. Another major shortcoming is the limited ability of these systems to orchestrate and streamline the imaging workflow throughout the imaging enterprise across the clinical specialties, IT and business management functions involved.

In this context, the renewed stimulus in the development efforts by major imaging informatics vendors, such as McKesson Technology Solutions, is critical. The innovative and advanced workflow solutions developed by McKesson's imaging and workflow solutions (IWS) business unit offer imaging providers the opportunity to rethink and enhance their enterprise workflow processes surrounding imaging – and position the imaging enterprise for continued success in the new healthcare environment.

## **BEST PRACTICE AWARD ANALYSIS FOR MCKESSON TECHNOLOGY SOLUTIONS – IMAGING AND WORKFLOW SOLUTIONS (IWS)**

Frost & Sullivan conducts cutting-edge visionary research by tracking the most important global Mega Trends, potential scenarios of specific trends in 2020 and beyond, and the macro to micro implications of these new Mega Trends. The unique feature of this research, compared to other predictive programs, lies in its ability to not only identify and evaluate emerging Mega Trends, but to also help clients translate those opportunities to everyday business and personal life – using the macro to micro approach.

---

“One limitation of legacy imaging informatics systems is the management of medical image data and related information as a health care silo – a somewhat rigid, monolithic and closed system that does not provide the complete picture of relevant patient information, is not in a readily deliverable format for its various consumers, and not easily accessible to all its stakeholders.”

- Nadim Michel Daher

---

## Key Performance Drivers for McKesson Technology Solutions

For the Company of the Year Award, the following five criteria were used to benchmark McKesson Technology Solutions' IWS' performance against key competitors:

- Growth Strategy Excellence
- Growth Implementation Excellence
- Degree of Innovation with Products and Technologies
- Leadership in Customer Value
- Leadership in Market Penetration

### Growth Strategy Excellence

Today, much of the basic functionality traditionally delivered through stand-alone RIS systems is being either integrated into PACS, or is being migrated as modules of electronic medical records (EMR). However, the need for robust workflow solutions in medical imaging is now higher than ever, going much beyond the capabilities of traditional RIS systems. Indeed, the next-generation medical imaging workflow solution holds the major responsibility of supporting providers' transition to the new reality of the medical imaging industry, which the American College of Radiology (ACR) refers to as Imaging 3.0.

Under the clinical, operational and payment models that are emerging and which underlie Imaging 3.0, workflow productivity and efficiency remain of paramount importance for imaging providers. In the new environment, in order to survive, providers must be able to operate profitably with less human resources, higher patient volumes, and lower per-procedure bundled reimbursement. However at the same time, the financial incentives of imaging providers are evolving from being based on volume to being based on value, while value and quality of their services is being measured, and their patient outcomes scrutinized.

Frost & Sullivan notes that as a leading vendor of medical imaging informatics solutions, throughout the last several years McKesson' IWS' business has been highly proactive in aligning its product portfolio and value proposition with these new care models, while preparing its customers to transition to these higher levels of operational efficiency and quality outcomes.

---

“In the new environment, in order to survive, providers must be able to operate profitably with less human resources, higher patient volumes, and lower per-procedure bundled reimbursement.”

– Nadim Michel Daher

---

### Growth Implementation Excellence

Realizing the tides were changing in U.S. healthcare and as the American Reinvestment & Recovery Act (ARRA) was enacted in February 2009, throughout the last five years McKesson IWS has worked relentlessly to remain a vanguard in the face of rapid changes affecting its healthcare IT and medical imaging customers, but also its own business as well. Now several years into the ARRA's Health Information Technology for Economic and Clinical Health (HITECH) Act, considerable incentive payments have been paid out for meaningful use (MU) stage 1, EMR adoption has ramped up considerably among all types of U.S. healthcare providers.

With basic certified electronic health record technology (CEHRT) now in wide use in the market, the attention of providers is turning back to the limitations posed by the core IT infrastructure underlying the EMR – an area that was relatively overlooked during EMR implementations. Indeed, it is more obvious today that the feasibility of a true patient-centric longitudinal patient record hinges on the availability of a solid vendor-neutral foundation, and that medical imaging cannot but be one of its central components.

Through the continued innovation of products and services, McKesson's imaging and workflow solutions (IWS) business unit has successfully leveraged the opportunity offered by ongoing changes in the healthcare industry. Frost & Sullivan research confirms that it has been able to evolve as a vendor of choice with current and new customers while growing organically as well as through synergistic acquisitions and strategic partnerships.

### Degree of Innovation with Products and Technologies

The result of a major research and development effort combining the latest in industry standards and cutting-edge technologies, McKesson's Enterprise Image Repository™ launched in 2012 provides the vendor-neutral IT platform supporting the open IT ecosystem needed for next-generation imaging informatics. A robust back-end uncoupled from the front-end diagnostic and clinical viewers, the enterprise repository helps unify and consolidate an otherwise disparate multi-vendor, multi-PACS and multi-facility environment.

The implementation through the enterprise image repository of the clinical data sharing standard, in addition to McKesson Study Share™ and McKesson Enterprise Image Clinical Reference Viewer™, two important recent product developments from McKesson, provide customers with efficient image exchange and image viewing capabilities within and beyond the core imaging enterprise.

---

“These new products help solidify McKesson's value proposition for each of the stakeholders in the medical imaging enterprise.

They open up to modern-day imaging providers the possibility for new and advanced workflow models, while concurrently, enhancing their clinical, operational and financial outcomes.”

– Nadim Michel Daher

---

Augmenting the best-in-class diagnostic imaging applications that have garnered the appraisal of McKesson by radiologists and other imaging specialists, these new products help solidify McKesson IWS value proposition for each of the stakeholders in the medical imaging enterprise. They open up to modern-day imaging providers the possibility for new and advanced workflow models, while concurrently enhancing their clinical, operational and financial outcomes.

### Leadership in Customer Value

Frost & Sullivan's research shows that McKesson's enterprise medical imaging solution has proven year over year its ability to maximize workflow productivity and minimize total cost of ownership (TCO) for imaging IT. McKesson's value proposition for medical imaging, upgraded on an ongoing basis through product innovation and professional services, is now broader than ever before. In Frost & Sullivan's opinion, it helps deliver wide value from imaging to the broad healthcare enterprise, by making the imaging-related information that is disseminated more accessible, comprehensive, relevant and actionable.

This value proposition was given another considerable boost with McKesson's acquisition of peerVue in 2012. A best-of-breed solution used by many facilities and resold by many other vendors as well, McKesson's Qualitative Intelligence Communication System™ (QICS) is a workflow engine that helps streamline communication between the various enterprise stakeholders. By leveraging interoperability to enhance the mechanisms of collaboration and the overall workflow productivity of the imaging enterprise, it can lead to more efficient patient management and higher quality of care, across the continuum of care.

McKesson's solutions portfolio effectively adds value to the clinical, IT and business enterprise across the medical imaging value chain. This value enhancement is not limited to radiology, but also to cardiology and the various other image-intensive specialties as well.

### Leadership in Market Penetration

The traditional market for RIS and PACS systems has changed dramatically in recent years, particularly in the U.S. While these systems still constitute two core elements of a robust medical imaging informatics platform, large forklift replacements of these systems have slowed down as providers are seeking to leverage previous investments and align imaging with the overarching enterprise healthcare IT strategy. At the same time, they are looking to generate efficiencies at various endpoints throughout the end-to-end imaging workflow, not only with the core image interpretation workflow.

---

“The most important measure of success today is the ability of each vendor to expand in depth and in breadth within their customer facilities. As such, the key to higher market penetration today hinges more largely on the vendors' workflow solutions, which must be wide-ranging and far-reaching.”  
– Nadim Michel Daher

---

A few of the major medical imaging IT vendors, including McKesson, continue to experience strong momentum in the radiology IT marketplace. However, the most important measure of success today is the ability of each vendor to expand in depth and in breadth within their customer facilities. As such, the key to higher market penetration today hinges more largely on the vendors' workflow solutions, which must be wide-ranging and far-reaching.

With a powerful portfolio of imaging, integration, archive and workflow solutions and a strong track record for cost-effective, value-enhancing technology and services, McKesson continues to solidify its position at the forefront of the competition in the enterprise imaging informatics market.

### CONCLUSION

There is a pressing mandate in the healthcare industry that calls on providers to be able to achieve higher quality of care and better patient outcomes, while at the same time making their care delivery much more cost-efficient than it is today. Most providers however, particularly medical imaging enterprises, are still largely unprepared to meet these high-level objectives which they are hard-pressed to achieve on various fronts.

Since the passing of the American Reinvestment & Recovery Act (ARRA) in February 2009, McKesson has innovated relentlessly. The company appears to be better keeping pace than the competition with the rapid changes affecting its medical imaging customers. It has been able to evolve as a vendor of choice among both current and prospective customers, while growing organically through synergistic acquisitions and strategic partnerships.

McKesson has taken the necessary steps to innovate, expand and harmonize its solution set to address the key challenges of enterprise wide medical imaging informatics, and has been highly proactive over the last several years in aligning its product portfolio with emerging care delivery models, while preparing customers to transition to higher levels of operational efficiency and quality outcomes.



### **About McKesson Technology Solutions**

McKesson Corporation, currently ranked 15th on the FORTUNE 500, is a healthcare services and information technology company dedicated to making the business of healthcare run better. We partner with payers, hospitals, physician offices, pharmacies, pharmaceutical companies and others across the spectrum of care to build healthier organizations that deliver better care to patients in every setting. McKesson helps its customers improve their financial, operational, and clinical performance with solutions that include pharmaceutical and medical-surgical supply management, healthcare information technology, and business and clinical services. For more information, visit [www.mckesson.com](http://www.mckesson.com).

### **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 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 40 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.

Auckland  
Bahrain  
Bangkok  
Beijing  
Bengaluru  
Buenos Aires  
Cape Town  
Chennai  
Colombo  
Delhi/NCR  
Detroit

Dubai  
Frankfurt  
Houston  
Iskander Malaysia/Johor Bahru  
Istanbul  
Jakarta  
Kolkata  
Kuala Lumpur  
London  
Manhattan  
Miami

Milan  
Mumbai  
Moscow  
Oxford  
Paris  
Pune  
Rockville Centre  
San Antonio  
São Paulo  
Seoul  
Shanghai

Shenzhen  
Silicon Valley  
Singapore  
Sophia Antipolis  
Sydney  
Taipei  
Tel Aviv  
Tokyo  
Toronto  
Warsaw

### Silicon Valley

331 E. Evelyn Ave., Suite 100  
Mountain View, CA 94041  
Tel 650.475.4500  
Fax 650.475.1570

### San Antonio

7550 West Interstate 10,  
Suite 400  
San Antonio, TX 78229  
Tel 210.348.1000  
Fax 210.348.1003

### London

4 Grosvenor Gardens  
London SW1W 0DH  
Tel +44 (0)20 7343 8383  
Fax +44 (0)20 7730 3343

877.GoFrost  
myfrost@frost.com  
www.frost.com

Frost & Sullivan, the Growth Partnership Company, works in collaboration with clients to leverage visionary innovation that addresses the global challenges and related growth opportunities that will make or break today's market participants. For more than 50 years, we have been developing growth strategies for the Global 1000, emerging businesses, the public sector and the investment community. Is your organization prepared for the next profound wave of industry convergence, disruptive technologies, increasing competitive intensity, Mega Trends, breakthrough best practices, changing customer dynamics and emerging economies?

*For information regarding permission, write:*

Frost & Sullivan  
331 E. Evelyn Ave., Suite 100  
Mountain View, CA 94041