KLAS Spotlight

Boston Software Systems

ROBOTIC PROCESS AUTOMATION SOFTWARE
IMPROVES EFFICIENCY

KLAS®

Separating fact from fiction in emerging technologies

BostonSoftware
SYSTEMS

Why This Spotlight? (KLAS explains)

Robotic process automation (RPA) is not a new concept, but adoption of RPA solutions in healthcare is starting to heat up, and providers are looking at these solutions to automate and execute billing & claims processing. In this spotlight, KLAS provides an early look at Boston Software Systems and the early outcomes and performance of some of their healthcare customers.

What Does Boston Software Systems Do? (A customer explains)

"Boston WorkStation is an automation software, and it can read certain parts of Windows applications or website information. It essentially does what a normal user would do. For example, for one of our scripts, the solution logs in to our EMR system's application through Google Chrome and does what a business office person would do. It goes through a list of claims from a file and reassigns them to a different collection code." —IT manager

Bottom Line

Clients appreciate the efficiencies gained by automating manual processes with Boston WorkStation in a variety of use cases. Many customers have had great experiences with the solution and report high satisfaction, although some say the application can be complex and requires specific technical skills to optimize functionality.

Key Competitors

Automation Anywhere, Blue Prism, Olive, UiPath

Number of Customers Interviewed by KLAS

13 individuals from 13 unique organizations
(out of 31 site provided by Boston Software Systems)

Makeup of Interviewed Customers
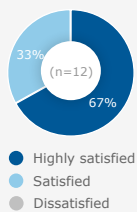
Midsize to large hospitals and health systems

Outcomes Expected by Clients

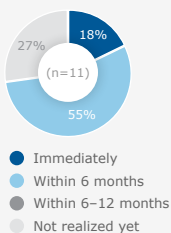| ✓ Achieved | ⧗ Pending | ✕ Not achieved | ★ Unexpected outcome |

✓ Reduce or repurpose FTEs
✓ Improve workflow efficiency
✓ Improve accuracy, reduce keystroke errors
✓ Reduce manual processes

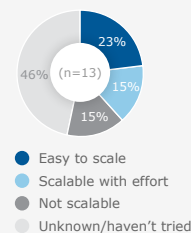# Boston Software Systems Customer Experience: An Initial Look

Overall Customer Satisfaction

(n=12)
33%
67%

● Highly satisfied
● Satisfied
● Dissatisfied

Time to See Outcomes

(n=11)
18%
27%
55%

● Immediately
● Within 6 months
● Within 6–12 months
● Not realized yet

Scalability

(n=13)
23%
15%
15%
46%

● Easy to scale
● Scalable with effort
● Not scalable
● Unknown/haven't tried

Boston Software Systems Performance in Key Areas

(1–9 scale)

Supports Integration Goals	Product Has Needed Functionality	Executive Involvement	Would Recommend to Peers
A-	**A-**	**A-**	**A**
(n=11)	(n=12)	(n=9)	(n=12)

Grading Scale

A+ = 8.55–9.0	C = 6.39–6.74
A = 8.19–8.54	C- = 6.12–6.38
A- = 7.92–8.18	D+= 5.85–6.11
B+= 7.65–7.91	D = 5.49–5.84
B = 7.29–7.64	D- = 5.22–5.48
B- = 7.02–7.28	F = <5.22
C+= 6.75–7.01	

Of 12 respondents, 100% would buy again.

Strengths

- Project management
- Solid, stable platform
- Product works as promoted

"Boston Software Systems' strengths are their project management and development folks. I have nothing but good things to say about the two primary people I have worked with. The development person solves problems without waiting for direction or hand-holding. This person works around issues and makes things happen without waiting. . . . The project manager has been awesome too. . . . That person does a better job than I do half the time at keeping track of what the open issues are, what we need to resolve, and how things are being processed." —Business office manager

Challenges

- Advanced functionality requires scripting knowledge
- Application can be specific and complex
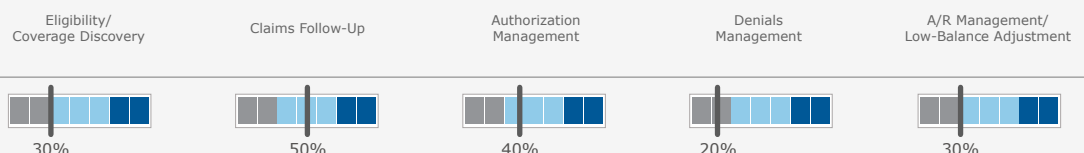- Clients would like more proactive communication about new technology

"Boston Software Systems markets the system like it is intuitive. Users should be able to pick it up, learn, and build their own scripts, but the front end isn't always agreeable. The system is basically a front-end tool like a VB application. We have to go to the VB side and write VB code in order to work the system precisely how we want to and make adjustments. The front-end tool isn't as user friendly as Boston Software Systems markets it to be." —Senior analyst

Customer-Validated Features & Services

Boston Software Systems Feature/Service	Eligibility/ Coverage Discovery	Claims Follow-Up	Authorization Management	Denials Management	A/R Management/ Low-Balance Adjustment
Percentage of Respondents Achieving/Validating (n=10)	30%	50%	40%	20%	30%

Boston Software Systems: Company Profile at a Glance

Founders: Sara McNeil, Rich McNeil

Year Founded: 1985

Headquarters: Boston, MA

Number of Customers: 2,800

Number of Employees: 30–100 (estimated)

Target Customer: Healthcare organizations

Funding: Privately owned, no external investment

Revenue Model: Multiple licensing options available: perpetual, subscription, enterprise, site-based, application-based, or project-based

Boston Software Systems: Healthcare Executive Interview

Matt Hawkins, EVP of Healthcare Strategy and Sales

What is your background?
I have over 20 years of experience in the technology space. After years in the commercial sector, I was bitten by the healthcare bug when I wanted to make a bigger market impact. The power of technology in this space means life and death—not only for the safety of our clients' patients but also for these organizations' financial viability. These healthcare organizations often work with such tight margins that every minute and every dollar counts. How efficient we can help our clients become continues to drive me daily to make a difference.

Why was Boston Software Systems started?
Boston Software Systems was in the RPA market before the term RPA became a catchphrase in the industry. In short, we do RPA, but more importantly, we know healthcare. We work to leverage clients' investment in existing systems without causing disruption to existing workflows and processes. Our RPA platform and expertise drive down cost, increase compliance, and deliver consistent improvements. Our fixed pricing project model puts our clients in the driver's seat and empowers them to make decisions that will bring maximum value to their organization. Proof our approach works? As reported by KLAS in this spotlight, over 70% of interviewed clients realize an ROI on their automation projects in the first 12 months of use. Those numbers are hard to beat.

What is Boston Software Systems' greatest differentiator?
We have been in healthcare for 30 years, and most of our employees are from the healthcare industry. Our understanding of how these systems work has allowed us to create over 4,000 unique connections to different systems. We measure value in days or weeks, not months or years. We stay laser focused on reducing the complexities that exist within the healthcare market, and that serves our clients' needs. Healthcare is unique, and in combination, our expertise and the power of our platform make us the best choice for healthcare automation. We understand the daily tasks that burden our clients. Because of this, we drastically shorten the time needed to build and deploy.

Please describe your technology platform:
Boston Software Systems allows customers to program their workflow solution in Visual Basic for Applications (VBA). In addition, Boston exposes a .NET API to allow programming workflow solutions in Visual Studio as well. Boston uses the client's PaaS solution if the client's workflows support cloud services; otherwise, the solution is implemented on-premises. SQLite is used as the database environment internally; Boston WorkStation interoperates with any external database. Boston WorkStation supports encrypting, signing, decrypting, and verifying across standard symmetric algorithms (AES, ChaCha, CAST, DES, 3DES, etc.), asymmetric algorithms (RSA, DSA, OpenPGP, SMIME, ElGamal), DPAPI, and JWE encrypting, decrypting, and signing.

KLAS' Points to Ponder

Mike Davis

HCIT market research and analysis expert with 40+ years of experience

The Positives: Boston Software Systems uses a Visual Basic for Applications scripting solution to create workflow scripts that are used to automate eligibility/coverage discovery, claims follow-up, authorization management, denials management, and A/R management. Clients have been able to reduce/repurpose staff, improve workflow efficiencies, and reduce manual processes. This product provides expected functionality and needed system integration. All interviewed clients would recommend this product to peers and would purchase the application again.

Organizations should consider the following:

The Solution's Long-Term Viability in Healthcare

Robotic process automation (RPA) solutions are emerging as a necessary component of healthcare operations. The ability to automate workflows to reduce labor costs while also improving process efficiencies is vital for surviving reductions in healthcare reimbursements. RPA solutions that can be easily and effectively integrated into patient access and RCM enterprise applications are likely to improve service margins. RPA solutions used to improve materials management and supply chain processes can drive down operating costs in those areas. Boston Software Systems has established a significant RPA client base that supports ongoing viability.

Solution Support Overhead

Healthcare organizations are focused on minimizing IT-support overhead. RPA solutions that require programming skills to tailor the workflow applications to deliver expected functionality may increase this overhead. Vendors with emerging RPA solutions are designing workflow modifications that can be created and tested by departmental staff without IT support. Artificial intelligence is emerging as a component of some RPA solutions, providing workflow decision algorithms that further improve solution efficiency. The ongoing support of RPA is a key purchase consideration factor.

Scalability Considerations

Healthcare organizations are continuing to see industry merger and acquisition activity that reduces the number of independent healthcare organizations while significantly expanding healthcare delivery networks. Providers may need to be able to scale across many modalities of care within healthcare networks—not only locally but also regionally and nationally. Web-based architectures support by PaaS environments (e.g., AWS, Google Cloud, and Azure Cloud) have proven scalability in healthcare and other industries. RPA applications not based on this architecture are more likely to face challenges of technology obsolescence and replacement.

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Our Mission
Improving the world's healthcare through collaboration, insights, and transparency.

For more information about KLAS, please visit our website:
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