



May 2013

Document N85

ROI CASE STUDY AUTOMATION ANYWHERE CERNER

THE BOTTOM LINE

Cerner's health care IT team needed to streamline and automate the integration of data from various applications into one common electronic medical records application for each of its clients. Nucleus found Cerner was able to use Automation Anywhere to eliminate manual steps in the process, increasing productivity while accelerating the company's ability to bring new clinics online.

ROI: **628%**

Payback: **6 months**

Average annual benefit: **\$130,007**

THE COMPANY

For more than 30 years, Cerner has been executing on its vision to make health care safer and more efficient. Headquartered in Kansas City, Missouri, the company provides systems for individual consumers, single-doctor practices, hospitals, employers, and countries. Cerner solutions support evidence-based clinical decisions, prevent medical errors, and empower patients in their care. They are used in approximately 10,000 facilities around the world including more than 2,700 hospitals.

THE CHALLENGE

Cerner's Ambulatory division is responsible for setting up electronic medical records (EMR) systems for health care providers. It is primarily focused on smaller doctor's offices and clinics that may have existing records in a number of different applications, spreadsheets, and formats, as well as paper. As the group's workload grew, the systems engineers recognized that their manual processes were both cumbersome and potentially error prone. To reduce manual data entry and conversion and accelerate the process of bringing new clients online with EMRs, the team began to explore automation tools. The tools they sought needed to be able to read data from Excel and transmit it to other Cerner tools as well as validate that the data was being built accurately through screenshots and log files.

THE STRATEGY

The team at Cerner began to investigate various automation tools, and after a number of free trials, they determined Automation Anywhere would best meet Cerner's needs because of its technical capabilities and its excellent customer support. The team built a business case for the investment and began the deployment with a small initial investment for a single license. It took one systems engineer about 3 months to create the first working model, which had about 15 different components.

"In addition to being able to accomplish tasks faster and with less direct interaction from a human, our processes are being accomplished more reliably and with fewer errors. Automation Anywhere also allows us to better organize and store validation data related to our client builds, making it easier to reference how a client was built in the past."

– Ben Mitchell, systems engineer, Cerner Ambulatory

Now the company has expanded its use beyond the initial EMR project and is taking advantage of Automation Anywhere to streamline and automate other development and testing projects.

Types of Benefits



KEY BENEFIT AREAS

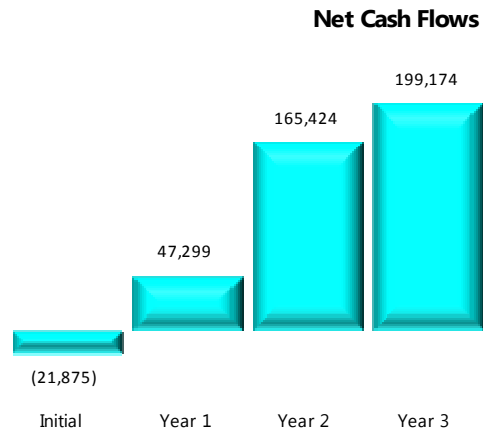
Using Automation Anywhere has enabled Cerner to automate its development and testing processes while increasing auditability and reducing errors. Key benefits of the project include:

- Increased developer productivity. Developer tasks that used to take two to three hours manually now take 30 to 45 minutes, and other tasks are automated in the background to save additional time, driving increases in developer productivity.
- Accelerated client project delivery. Because tasks can be completed more quickly and developers can easily refer to existing client builds as reference models, they can accelerate the delivery of functional EMR systems to new clients.

Cost : Benefit Ratio | 1 : 11.1

KEY COST AREAS

Key cost areas for the project included software and personnel.



BEST PRACTICES

Cerner started with a free test version of the application for evaluation and then purchased a single license as it tested Automation Anywhere's capabilities to support its development needs. As the project's success grew, Cerner could justify further investment in the technology and its use is now being extended to other departments and divisions.

CALCULATING THE ROI

Nucleus quantified the initial and ongoing costs of software and personnel to calculate Cerner's total investment in Automation Anywhere. Benefits quantified included productivity savings that resulted in both direct and indirect benefits. In some cases, divisions were able to increase their output while avoiding additional hires; in others, teams were able to accelerate the delivery of client projects through automation. In both cases, savings were quantified based on the average annual fully loaded cost of an employee.

FINANCIAL ANALYSIS

Automation Anywhere

Annual ROI: 628%

Payback period: 0.5 years

ANNUAL BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	33,750	135,000	168,750
Indirect	0	30,424	30,424	30,424
Total per period	0	64,174	165,424	199,174

CAPITALIZED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Project consulting and personnel	0	0	0	0
Total per period	0	0	0	0

DEPRECIATION SCHEDULE	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Project consulting and personnel	0	0	0	0
Total per period	0	0	0	0

EXPENSED COSTS	Pre-start	Year 1	Year 2	Year 3
Software	5,000	0	0	0
Hardware	0	0	0	0
Consulting	0	0	0	0
Personnel	16,875	16,875	0	0
Training	0	0	0	0
Other	0	0	0	0
Total per period	21,875	16,875	0	0

FINANCIAL ANALYSIS	Results	Year 1	Year 2	Year 3
Net cash flow before taxes	(21,875)	47,299	165,424	199,174
Net cash flow after taxes	(12,031)	26,014	90,983	109,546
Annual ROI - direct and indirect benefits				628%
Annual ROI - direct benefits only				489%
Net Present Value (NPV)				181,171
Payback period				0.5 years
Average Annual Cost of Ownership				12,917
3-Year IRR				337%

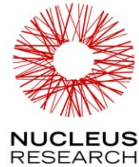
FINANCIAL ASSUMPTIONS

All government taxes	45%
Cost of capital	7.0%



By the Numbers

Cerner's Automation Anywhere project



Annual Return
on Investment **628%**

6

months

The total time to value, or
payback period, for the project

Cost : Benefit
Ratio **1 : 11.1**

\$130,007

Average annual benefit

THE PROJECT

Cerner's health care IT team needed to streamline and automate the integration of data from various applications into one common electronic medical records application for its clients. Nucleus found Cerner was able to use Automation Anywhere to eliminate manual steps in the process, increasing productivity while accelerating the company's ability to bring new clinics online.

THE RESULTS

Increased developer productivity by 60%
Avoided .5 additional FTEs per year

Number of **users: 1**

3
Months

Total time for the company to
deploy Automation Anywhere

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- Ben Mitchell, systems engineer, Cerner Ambulatory