



DYNAMIC PC REFRESH INITIATIVE AT CSX DECREASED HELP DESK TICKETS BY 70%



**ENTERPRISE
INTEGRATION**

BUSINESS CHALLENGE

CSX, a leading rail-based transportation company, had a highly distributed environment with 650 remote offices and a highly mobile workforce. With an aging PC population of 12,000 PCs with an average age of 4 years and 3000 thin client devices with an average age of 5 years, technology refresh was essential. CSX wanted to reduce costs and decrease helpdesk tickets. As a homeland infrastructure provider, security and data encryption were paramount. CSX needed complete remote recoverability and remote software distribution functionality. All improvements had to be seamless to the end user community.

CLIENT PROFILE: CSX
www.csx.com

Industry
Transportation

Employees
32,000

Headquarters
Jacksonville, FL

Solutions
PC Refresh

THE EI SOLUTION

EI spent three months in the field defining the existing user experience, mapping tools and processes to specific improvements that would directly and positively impact field performance. EI and CSX then partnered to deliver a dramatically improved experience for remote workers.

The EI Super Image was deployed to all new PCs during the refresh and has now been adopted as the standard “gold image” for the client. It creates a single image for all make

“Without a lot of direction from CSX, EI drives efficiency into our operations and keeps improving and looking for better ways, tools and products to help us. Working with EI has totally changed the way we support end users.”

and model PCs and allows complete remote recovery and software distribution over slow WAN links. EI developed the process that allows the image to be installed at the OEM Factory, shipped directly to the refresh site thus eliminating warehousing costs and additional shipping fees. EI

Automated Deployment Tool was developed to rapidly migrate all data and profile information from the old PC to the New PC enabling “one click” migration, installed software capture and fresh install of required applications.

EI also deployed WAN optimization devices (Riverbed Steelhead) at the remote sites to improve the end user experience and reduce duplicate data transfers from the WAN. A resulting Six Sigma validation process showed that the core applications: e-mail, Intranet, Mainframe, Citrix and MS Office products performance equaled the performance of a local area network across the wide area network.

THE EI VISION:

Success through excellence in people, process and technology.

PEOPLE

EI is made up of the brightest, most passionate, enthusiastic and innovative people in the IT business. Our highly skilled and knowledgeable staff, with more than 600 certifications, has engineered some of the most extraordinary IT solutions in the industry.

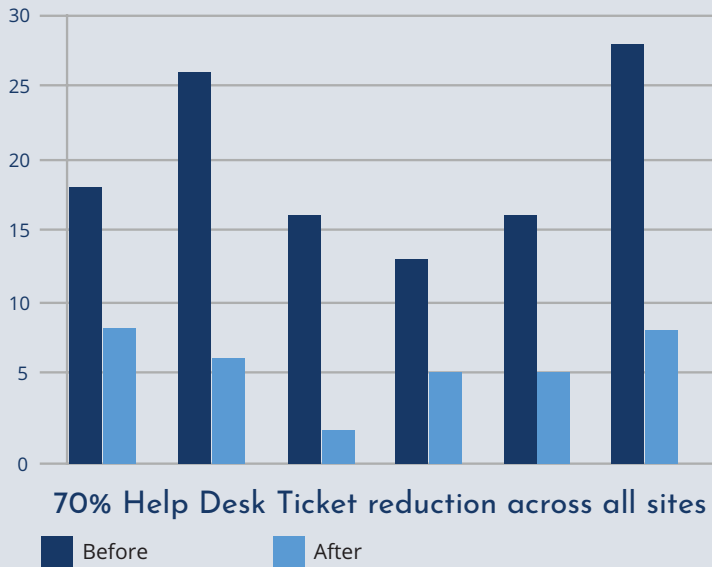
PROCESS

EI has developed agile IT service delivery processes based on ITIL® and Six Sigma that we can customize for your unique needs. Measurable, integrated, automated, predictable and fact-based processes are key to driving breakthrough improvements.

TECHNOLOGY

EI's proven technology, tools and best practices optimized for your business allow EI to deliver on the true value of IT. Our strategic, proprietary support tools create raving fans as we deliver meaningful results in your business.

PC Refresh



THE FUTURE

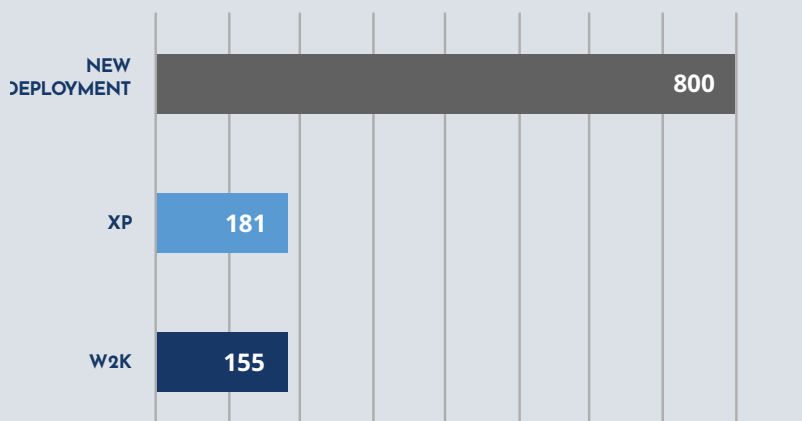
By developing advanced process and technology to improve the enterprise upgrade, EI has ensured that CSX has the right tools and processes to take them into the future. The PC Refresh initiative allows CSX to upgrade in-place to the next windows operating system without impacting the WAN or everyday end user productivity. CSX is ready for the next operating system deployment and will not experience the huge cost of migration in the future.

If you need help with any of the above, contact Enterprise Integration Information Security at 904-928-8137.

PORT	REDUCTION	LAN	WAN	TRAFFIC %
Total Traffic	--	15.9 TB	2.2 TB	--
CIFS:TCP (445)	(89.6 %)	11.5 TB	1.1 TB	72 %
nfs (2049)	(89.6 %)	1.2 TB	136.2 GB	8 %
Proxy (8080)	(50.7 %)	876.8 GB	432 GB	5.3 %
CIFS:NetBIOS (139)	(82.5 %)	802.6 GB	140.1 GB	4.9 %
MAPI (7830)	(72.8 %)	571 GB	155 GB	3.4 %
Unknown (85)	(88.2 %)	525.6 GB	61.9 GB	3.2 %
HTTP (80)	(71 %)	305.9 GB	88.7 GB	1.8 %
LDAP:Active Directory (389)	(75.9 %)	98.8 GB	23.7 GB	0.6%
https (443)	(85.7 %)	64.3 GB	9.1 GB	0.3%

WAN Optimization removed 14 terabytes of duplicate data from the WAN

Number of Tasks Accomplished in an 8 Hour Period



Measured Productivity Improvement