

Case Study

Digital Transformation at the Salvation Army

with Low-Code Digital Process Automation



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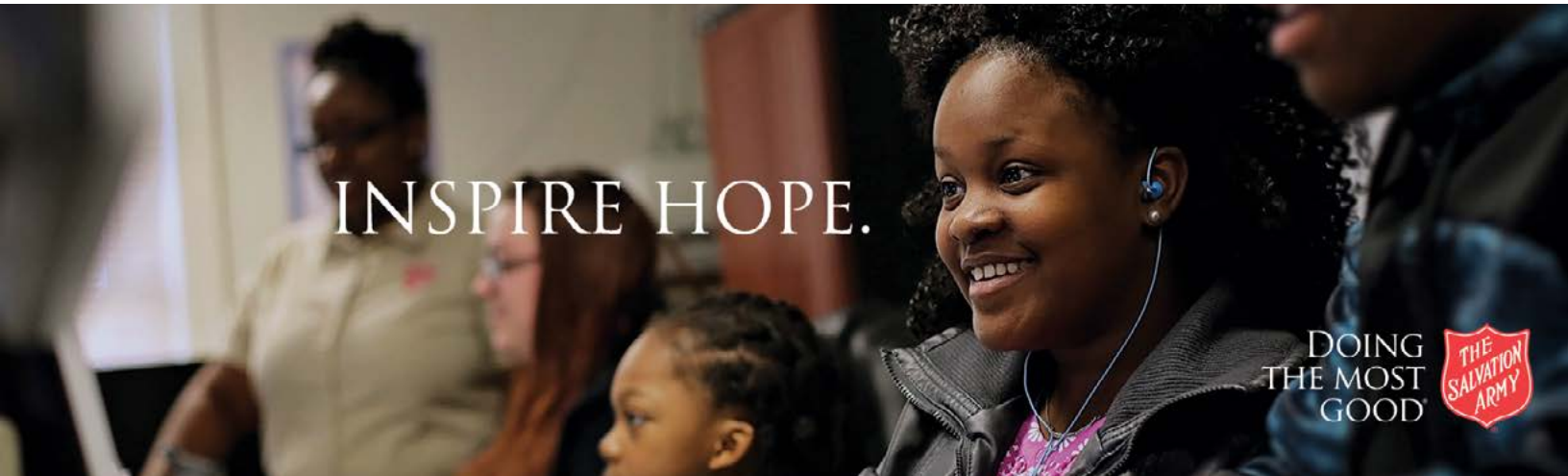
April 2019



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As a global non-profit, The Salvation Army is both a large organization that serves a multitude of people, as well as an organization that necessarily operates on a shoestring budget.

When it came time to modernize its decades-old Lotus Notes infrastructure and all the apps that had been built on it over the years, the organization decided to move to Microsoft Office 365 and SharePoint.

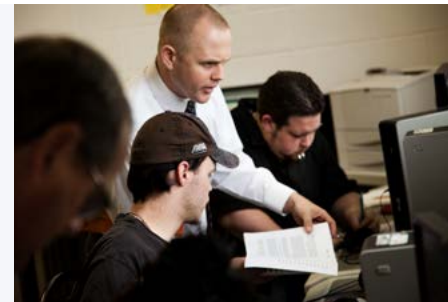
However, these Microsoft technologies alone did not afford the organization a cost-effective way to build applications that would meet the diverse needs of the people it served.

Instead, it turned to AgilePoint, a low-code Digital Process Automation vendor. Using AgilePoint, non-technical 'citizen developers' were able to build a range of applications, from simple internally-facing apps to complex externally facing applications for corporate-wide use.

The results were dramatic: more applications for less money, giving the entire Salvation Army community greater ease-of-use and capabilities that enabled the organization to move forward with its digital transformation efforts without compromising its core mission.

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▪ The Salvation Army and its Application Challenges

The Salvation Army's familiar bell-ringers and thrift stores belie the size and age of the organization. Founded in 1865, The Salvation Army is both a church and an international charitable organization. It has a worldwide membership of over 1.7 million people across 131 countries and provides services in 175 different languages.

The Salvation Army has over 100,000 employees across five global zones, and The Salvation Army USA itself has four regions. Its western region, which covers 13 western states including Alaska and Hawaii, has 6,000 employees.

Independent rating agencies give The Salvation Army high scores for the percentage of its funds that go directly to the services it provides, which means it has to run a tight ship – and its various IT departments at its regions and zones follow suit.

Over 20 years ago, the western region standardized on Lotus Notes, and it had been adding Notes applications since that time. When it became clear that migrating off of Notes to modern technology had become mandatory, it had to take a low-cost approach – perhaps lower cost than most for-profit organizations of similar size.

One essential requirement: the organization had to ensure that whatever technologies replaced Notes would not fall into the same legacy pattern, requiring another expensive migration a few years down the line.

The western region's IT group decided to implement Microsoft Office 365 and SharePoint as the primary replacement for Notes as part of an overall modernization of its email and other communications infrastructure.

When it became clear that migrating off of Notes to modern technology had become mandatory, one essential requirement was identified:

It had to take a low-cost approach and ensure that whatever technologies replaced Notes would not fall into the same legacy pattern, requiring another expensive migration a few years down the line.

Microsoft technologies alone, however, didn't provide the low-cost flexibility for building applications that would afford the organization both simple implementation in the short term and the avoidance of legacy technology debt in the future.

In fact, the region's apps team considered rewriting some of its Notes apps on SharePoint, but found that the technology didn't offer these strategic benefits. SharePoint-based apps simply required too much rework every time Microsoft released a new version of its technology, in particular, Office 365 cloud services. Another issue the team struggled with: its accounting system. "We've got an accounting system from a smaller vendor," Karl Larsson, Director of Software Development at The Salvation Army's western region said.

Because of the quirks of this particular application, Larsson realized that it required a measure of customization in order to implement the accounting-related workflows the organization required. "We're rolling on our own, unique to our needs."



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As a result, the team decided to evaluate various workflow platforms, with a basic invoicing system as the first application. “We were looking for workflow solutions,” explained David Brown, Director of Applications at The Salvation Army’s western region. “We had a major workflow partner selected, but that ended in a poor situation.”

Part of the problem: the workflow platform didn’t offer the licensing model The Salvation Army required. Given their limited resources, the team was loathe to bring in an outside consulting firm to address the challenges with the accounting workflows. They needed a different approach.

The answer: low-code.

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Director of Applications

▪ The Salvation Army’s Modernization Journey

Once David Brown’s team decided on Office 365 and SharePoint, they looked at various Microsoft -centric low-code workflow vendors, but none of them offered the long-term flexibility and avoidance of additional legacy technology debt the organization required. So they continued to look for a viable platform and stumbled upon AgilePoint.

Brown explained their journey to AgilePoint. We were concerned about the limitations of products that are only Office 365/SharePoint oriented, as well as the limitations of Office 365/SharePoint itself. We knew we wanted something that would work with Office 365 and Microsoft SQL standards, as well as other applications like Salesforce.”

In spite of concerns that AgilePoint was a newer and smaller vendor, its Digital Process Automation (DPA) platform fit the bill. “AgilePoint brought us a part of

the project we could now do ourselves,” Brown continued. “A number of times we were able to develop the entire solution in AgilePoint. The alternative would have been traditional development, even on the Office 365 platform.”

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The team faced challenges, of course. They wanted to build workflows that interacted with various other applications, including on-premises apps and cloud-based ones. Migrating the older Notes apps was difficult, especially considering that it was important to modernize them in the process, and everything had to be done on the tight budget of a non-profit.

AgilePoint proved especially adept at helping The Salvation Army deal with these issues. "AgilePoint takes care of all the common challenges, freeing us up to concentrate on those things unique to The Salvation Army," Larsson explained. This enabled the team to tackle more difficult applications right out of the gate. "There was a risk to rolling out a large scale, enterprise level application so early on in our adoption of AgilePoint," Larsson continued, "but user adoption was immediate and relatively seamless."

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Karl Larsson,
Director of Software Development

▪ The Role of 'Citizen Developers'

One of the team's most important priorities was to empower non-technical people to build applications with AgilePoint. These 'citizen developers' would help the organization reduce the cost of development and maintenance of its applications while simplifying its application portfolio.

Supporting citizen developers is one of the strengths of low-code platforms like AgilePoint, which also provides capabilities for professional, or 'full lifecycle' developers.

The team's first citizen developer: Jonathan Funk, originally hired as a helpdesk professional. "When we went with AgilePoint, we decided to

make Jonathan a developer, even though he didn't have any formal education or training as a developer," Brown said. "He was great at helpdesk but he also liked automating his tasks to be more productive."

"Building apps on AgilePoint has allowed me to be more focused and more proficient," Funk said. "I can leverage AgilePoint as the one interface to work with other key technologies. AgilePoint has taken me from creating a few apps a year to dozens. It's definitely achieved our goal of rapid development."



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The team's first citizen developer

▪ Ramping Up the Applications

The most urgent application for The Salvation Army: an invoice workflow app for the churches. "Local churches get invoices," Larsson explained. "We need them to sign off on them and then send to headquarters to get them paid."

Complicating matters was the fact that Salvation Army employees were using corporate credit cards – and remember, these employees were scattered over hundreds of churches and other facilities. "AgilePoint was in the mix because we wanted to have a repeatable process for handling corporate credit cards, including enabling users to sign off on expenses," Larsson continued.

The team had already been working on an invoice app for SharePoint they had written in Angular, a popular JavaScript framework. However, this Angular app didn't have the workflow the team required.

AgilePoint solved this problem without requiring a complete rework of the Angular app. "With AgilePoint, we took 70% of the code and turned it into a credit card approval system," Larsson said. "We built AgilePoint onto the front end for end users."

In fact, the team compared the cost of using AgilePoint to hiring a third-party developer to custom-code the credit card reimbursement workflow on SharePoint and found a substantial difference in cost. "We're getting real bang for our buck with our AgilePoint investment," Brown added.

Another application that the team built in its first year using AgilePoint: a music summer camp online registration app.

In this case, the app replaced a paper-based process: the organization would mail forms to parents



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to fill out and return, including medical releases and other documentation. In the office, data entry clerks had to key in the information from the forms, a time-consuming and error-prone approach.

The app the team built with AgilePoint, in contrast, was completely paperless. It presented a simple

web-based e-form for parents, and used AgilePoint's DPA capabilities to compile the information from the form and then route the information to the right people for processing, approvals, and signoffs. The team even built a needed e-signatures module – no third-party product or extra cost required.

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▪ Business Results

The primary benefit of using AgilePoint was cost savings as compared to any of the alternatives, including other tools or outsourcing development to a third party.

One of the reasons why AgilePoint proved so cost effective: the vendor charges by shared concurrent seats, not by how many users access an application. "We can deploy apps to all of our 6,000-user base with a small number of concurrent licensed users, without buying 6,000 licenses," Brown explained.

But the benefits went well beyond simple savings. The organization was able to demonstrate how both citizen developers (Brown's team) as well as the professional developers in the IT organization (Larsson's team) were able to work together in parallel to implement sophisticated workflow-based apps with front ends for both internal and external consumption.

As they ramped up, these small teams were able to build new applications at an increasing rate, without maintenance of the developed applications slowing them down. This low-maintenance aspect is a core benefit of AgilePoint's unique low-code approach, as it helps organizations avoid the legacy problem.

AgilePoint and the low-code DPA approach changed the way the team looked at building applications, as it was now far simpler and less time-consuming. "For most of our applications, we have experienced a 70-80% reduction in our application development

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lifecycle,” Brown said. “In most cases, the same single IT staff member assigned to the ‘we need an app built’ project can take it from initial discovery all the way into production.”

In fact, the cost savings didn’t mean that the organization budgeted less for application development. Instead, they doubled the number of applications they were planning to create. In 2017, the first year The Salvation Army used AgilePoint, they built ten apps, including some for corporate-wide use. Then in 2018, they doubled this number to 20 – and Jonathan Funk, its citizen developer, built all but two.

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▪ The Intellyx Take

As this story is about a resource-constrained organization’s initial foray into low-code and DPA, it is by nature limited to a relatively small number of applications.

The bigger picture, however, is how these new technologies are rapidly coming to dominate how organizations of all sizes are approaching how they build and maintain applications.

Applications, after all, are at the forefront of digital transformation. As companies transform themselves into customer-led organizations, the applications they put in front of customers, employees, and others become the calling cards for the entire enterprise.

While there will continue to be a role for hand-coding in such enterprises for the foreseeable future, the rise of low-code and DPA heralds a shift in focus. No longer do development resources or software



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lifecycle challenges have to create bottlenecks to progress.

With technologies like AgilePoint, the organization can move as fast as it needs to in order to achieve the ongoing goals of its digital transformation.

For The Salvation Army, the results speak for themselves. It was able not only to build apps that it had originally planned as part of its Notes migration, but it was also able to build other apps it had previously no budget for.

In addition, 100% of the respondents of an internal survey reported that the AgilePoint apps they are using have both increased their department's productivity and improved its efficiency. In terms of overall ROI, therefore, AgilePoint is a big win for the organization.

As time moves on and the application team builds more apps, the power, diversity, and flexibility of such apps will become commonplace and expected – both among employees as well as among the people The Salvation Army helps.

In other words, there's no going back – the low-code DPA approach and AgilePoint in particular represent new ways to provide value to the organization's con-

stituents cost-effectively, and there's every reason to believe the entire global organization will soon follow suit.

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The BIG PICTURE:

How these new technologies are rapidly coming to dominate how organizations of all sizes are approaching how they build and maintain applications.

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In other words, there's no going back – the low-code DPA approach and AgilePoint in particular represent new ways to provide value to the organization's constituents cost-effectively.





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About the Author:



Jason Bloomberg

Jason Bloomberg is a leading IT industry analyst, Forbes contributor, keynote speaker, and globally recognized expert on multiple disruptive trends in enterprise technology and digital transformation.

He is founder and president of Agile Digital Transformation analyst firm Intellyx. He is ranked #5 on analytica's list of top Digital Transformation influencers for 2018 and #15 on Jax's list of top DevOps influencers for 2017, the only person to appear on both lists.

Mr. Bloomberg is the author or coauthor of four books, including *The Agile Architecture Revolution* (Wiley, 2013). His next book, *Agile Digital Transformation*, is due within the next year.

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About AgilePoint:

AGILEPOINT

Headquartered in Mountain View, California, AgilePoint is a global, established, disruptive technology provider that is accelerating the emerging digital business paradigm through its flagship product, AgilePoint NX.

AgilePoint NX, a no-code/low-code application platform with a web-scale, cloud-ready architecture, is democratizing and transforming how organizations of all sizes are approaching how they build and maintain applications, the forefront of digital transformation as companies looking to transform themselves into customer-led organizations.

AgilePoint customers use AgilePoint NX to create applications spanning a wide range of use cases, complexity, including core applications. AgilePoint's innovative and unique no-code/low-code approach helps organizations avoid the legacy problem by building applications that would afford both simple implementation in the short term and the avoidance of legacy technology debt in the future.

AgilePoint is also known to offer the industry's most flexible 'pay as value grow' pricing and contract terms. AgilePoint has more than 2,000 global customers, including Fortune 100 companies and SMBs.

Visit www.agilepoint.com for more information.