

Case study

Managed IT Services Enable a Non-profit Online Marketplace to Modernize Legacy E-commerce Site and Enhance End User Experience



Customer Overview

Customer:

A non-profit e-commerce marketplace

Profile:

The multi-tenant non-profit marketplace provides educational and workforce-related services to over 135 chapters

Industry:

Non-profit

Services:

Managed IT Services

Business Need

The non-profit e-commerce marketplace focused on sustainability, centralizing the donation and sale of reusable items for people to a global network of 120 chapters throughout the country. Offering the ability to scan, merchandise, and upload items to the site, the marketplace allows global visitors to browse the widest imaginable array of products.

The client was growing rapidly, with \$140 million in annual revenue, growing 20% YoY over the last 5 years, and achieving almost \$1 million in sales per day. Yet, their e-commerce system, developed on ASP. Net was over 15 years old, and the organization was supported by a small, 3-person team. This led to several challenges in evolving the design and functionality of the platform to keep up with the pace of the business. Not only did the e-commerce client lose out on new growth opportunities, but they also failed to retain customers against emerging competitive alternatives.

In addition, the website was difficult to navigate, visit times were extremely large, and outages were frequent. User engagement was close to nil, and the lack of ADA compliance made it worse. Despite the pace of business growth, the technology infrastructure was not scaling. The marketplace did not have the required skills in-house to evolve its platform, and the absence of a modern mobile application made it difficult to attract millennials.

Looking at the future growth perspective, the e-commerce client was seeking opportunities to modernize their website, ensure scalability and usability, increase performance, and penetrate new markets.

With this motivation, the client connected with Synoptek. Key objectives for the engagement included:

- Providing a sustainable platform for 128 members using the current website
- Addressing the growing needs of the community, from a Mission and Commerce perspective
- Being relevant in an increasingly competitive e-commerce landscape
- Addressing ADA/WCAG compliance and delivering a similar user experience to people with disabilities
- Driving operational excellence with a DevOps model for Development and Operations Support

Solution and Approach

Since the beginning of the engagement, Synoptek spent valuable time engaging with the e-commerce team to analyze the marketplace and understand existing code. This helped them estimate the most accurate level of effort required to meet their objectives as well as to allow them to scale and modernize their current platform. We curated a 5x5x5 vision for the client, which meant 5x revenue over 5 years executing 5 key strategies, which included:

1. Achieving an enhanced customer-centric culture
2. Capitalizing on demand for second-hand markets
3. Reaching new customer segments through digital transformation
4. Leveraging technology advancements in Business and Artificial Intelligence
5. Leveraging the existing brand and community

Since third-party e-commerce platforms, such as Magento or Salesforce Commerce, are designed for stores with standard SKUs, they didn't make sense for the client who had millions of SKUs, with new ones being added every day. Also, since off-the-shelf packages do not offer auction or bidding capabilities, the decision to upgrade the current application stack was made.

We took a "full service" approach to redesign the look and feel of the website, improve navigation, and rearchitect to a new development stack. We allotted a single project manager working to guide and organize the delivery effort using the Hybrid Agile Methodology and deliver a high-quality multi-tenant marketplace for the resale of used products within decided timeframes.

To accelerate time-to-market for new features at a reduced cost, Synoptek utilized an iterative methodology and effectively supported the e-commerce client's evolving platform over time. Not only did the product owner work with the development team to prioritize user stories and backlog items before each sprint but also followed a standardized process to deploy new features.

Next, by automating build integration processes, we helped integrate the code and perform continuous regression and feature testing. Synoptek's testing team also created and ran test scripts and manual testing through test case development. Once the build was tested, the current state of that feature was integrated with UAT for further review by the client team. After each sprint, the client team decided on the deployment and release of those features. This iterative continuous integration, testing, and deployment cycle enabled the platform to evolve and continued to be transformed over time.

The solution we offered comprised of four main components:

- E-commerce platform modernization
 - Create/modernize/upgrade features related to the Buyer Portal
 - Improve navigation as well as the look and feel of the website
- Seller site upgrade and modernization
 - Upgrade Admin and Seller's site to the latest .Net Core technologies, with enhanced features and a better User Interface
 - Enable ADA/WCAG compliance to ensure the website can serve the entire community without limitation
 - Implement Azure analytics to allow sellers to get detailed insights into store performance
- Mobile application development (for both android and iOS)
 - Create a native mobile application for buyers, with features largely aligned to the Buyer site
- Existing and ongoing site management
 - Provide 24x7x365 support for infrastructure and code that make up the suite of applications (i.e., Buyer site, seller site and native mobile applications)
 - Deliver continuous enhancements to stay relevant in a dynamic world
 - Carry out system assessment and lifecycle management

Business Benefits

The delivery of technical and non-technical strategies by Synoptek helped in elevating the performance and functionality of the client's website, both in terms of revenue and community impact. Our integrated, best-of-breed approach has helped the e-commerce client build on their website and leverage external systems and capabilities to meet specific needs. Today, buyers can enjoy an improved shopping experience and sellers can easily list an unimaginable array of items – while keeping up with the trend of sustainability.

Post-launch, the e-commerce client has been on course to achieve beyond the 20% organic growth that they have realized year over year, for the past 5 years. The modern e-commerce platform has put them in a better position to attract new buyers, and the introduction of the mobile application allows the client and participating members to reach new demographics and drive better growth.

Thanks to the complete redesign and modernization of their existing website, the delivery of Managed Azure Cloud Services, and the implementation of the Azure analytics reporting platform, the client is now able to:

- Provide a seamless and consistent user experience to serve the underserved community via web and mobile interfaces
- Reach new customer segments through effective digital transformation via the introduction of the mobile app
- Get insight into the performance of the website as well as understand which SKUs are working and which aren't
- Easily introduce enhancements into the website such as product category recommendations, customer sentiment analysis, and enhanced search capabilities
- Effectively integrate an array of new libraries and extensions to improve end-user experience
- Make informed decisions by leveraging technology advancements across Business and Artificial Intelligence
- Build upon their brand and model by leveraging the existing network of employees, customers, and constituents, and the power of social media
- Drive an improved customer-centric culture by implementing modern e-commerce capabilities



Post-launch, sales crossed **\$240M**



Sales growth improved from **20% YoY** to **44% YoY**



Organic growth scaled **20% YoY**



With the Managed Azure Cloud Services the client is growing **40-50%** per year

About Synoptek

Synoptek delivers accelerated business results through advisory led transformative systems integration and managed services. We partner with organizations worldwide to help them navigate the ever-changing business and technology landscape, build solid foundations for their business, and achieve their business goals.