Synoptek

Case study

Transformative Strategy, Design, and Modernization Program Enables a Nonprofit Online Marketplace to Double Its Business



Customer Overview

Customer

A nonprofit e-commerce marketplace

Profile

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

Industry

Nonprofit

Services

- Technology Consulting Services
- Product Development Services
- Platform Modernization Services
- Managed Services

Business Need

The nonprofit marketplace focuses 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 achieving tremendous success 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, its 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 client lose out on new growth opportunities, but it 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 matters worse. The nonprofit 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 client was seeking opportunities to modernize its 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

To cater to the client's needs, Synoptek followed the **Envision**. **Transform**. **Evolve**. methodology. In the envision and transform phase, we delivered a host of professional services to modernize and transform the e-commerce platform and drive extraordinary business results. In the evolve phase, we provided a range of managed services that focused on maturing operations and enabling a steady improvement in operational processes.



maximizing ROI.

Consulting: Business and Technology-enabled Strategy

As part of a 4-month consulting engagement, Synoptek conducted a complete review of the overall business and the legacy platform. We talked to customers, key business stakeholders, and the e-commerce team to analyze the marketplace and understand the existing code. This helped in estimating the most accurate level of effort required to meet the client's objectives as well as to allow it to scale and modernize their current platform.

We also evaluated strategic options such as using a platform like Salesforce or Magento or custom building a solution to meet the client's unique needs. We realized that third-party e-commerce platforms are designed for stores with standard SKUs and were a complete misfit 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, we made the decision to upgrade the current application stack.

We also curated a 5x5x5 vision – 5x revenue over 5 years executing 5 key strategies – which the client willingly embraced, embodied in the following executive summary we presented to the board of directors:



Product Development and Platform Modernization

Synoptek 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, we utilized an iterative methodology and effectively supported the 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 three main components:

- E-commerce platform modernization
 - Created/modernized/upgraded features related to the Buyer Portal.
 - Improved navigation as well as the look and feel of the website.
- Seller site upgrade and modernization
 - Upgraded Admin and Seller's site to the latest .Net Core technologies, with enhanced features and a better User Interface.

- Enabled ADA/WCAG compliance to ensure the website can serve the entire community without limitation.
- Implemented Azure analytics to allow sellers to get detailed insights into store performance.
- Mobile application development (for android and iOS)
 - Created a native mobile application for buyers, with features largely aligned to the buyer site.

Managed Services

Synoptek provided managed services to the client's legacy platform as well as for the new, modernized site:

- Provided capacity to make short-term changes (which were minimized) to the legacy platform during the interim transition period.
- Enabled continuous improvement of the platform with weekly and monthly releases orchestrated with enterprisecaliber DevOps processes to ensure balance between stability of production environment and new changes.
- Conducted existing and ongoing site management, including 24/7 support for infrastructure and code that make up the suite of applications (i.e., Buyer site, seller site and native mobile applications).
- Enabled cloud cost optimization and provided around-the-clock security monitoring and advisory.
- Enabled continuous reporting and analytics to monitor the performance of the website, identify low-performing SKUs, and user experience issues.

Testimonial

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Synoptek has been a tremendous partner in modernizing the platform and experience and elevating the site and its true purpose: furthering our mission to help people thrive through the power of work.

President and CEO

Business Benefits

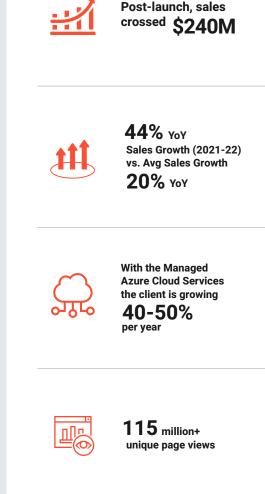
Synoptek's ability to deliver a tremendous transformative strategy and vision and then execute a transformative project to completely re-envision, re-design, modernize and transform the e-commerce platform enabled the client to nearly double its business.

Our services elevated the performance and functionality of the client's website, both in terms of revenue and community impact. The integrated, best-of-breed approach we took has helped the client build on its website and leverage external systems and capabilities to meet specific needs. Today, buyers can enjoy an improved shopping experience and sellers can easily list a diverse array of items – while keeping up with the trend of sustainability.

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Thanks to the complete redesign and modernization of the existing website, 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, the client has been on course to achieve beyond the 20% organic growth that it has realized year over year, for the past 5 years. The modern e-commerce platform has put it 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.

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.

