Scheduling for Success

How a Software-as-a-Service Company Helps Retail Businesses Run Better

A Swan Software Solutions Case Study

THE CLIENT

D and E worked as retail sales-operations leaders. Their careers involved a variety of skills from operations to marketing to workforce management. As executives, they had the ability to see into the operations of retail businesses. They noted a very big problem--scheduling.

Most retail businesses sit down to write their schedule with hopes, guesses, and maybe a set of dice. Deciding which employees to schedule, when to schedule them, and how many employees to put on a given shift is hard when one has no idea how busy the shift might be.

Underscheduling could be costly in terms of unhappy customers and a damaged reputation.

Overscheduling could be costly if the price of labor exceeds the sales profit.

Another aspect of scheduling D and E noticed had a problem was the poor allocation of shifts. A high-performing sales clerk would be scheduled at a low-volume time and a low-performing employee would be scheduled to work a busy shift.

The high-performing sales clerk was left frustrated. The low-performing sales clerk ended up overwhelmed.

Both from their experience and through prototyping with other retailers, D and E were able to validate the need for strategic scheduling.

Manager A

Manager A sits down to write the schedule for the week. Saturdays are a difficult day to schedule. With the recent downturn in sales, Manager A decides to save money and only schedule two people for the shift. While relaxing on a beach with his family, he receives a frantic phone call from the overwhelmed staff. When he returns to work on Monday, a host of complaint letters are waiting for him.
He guessed wrong.

Manager B

Manager B begins to write the schedule. Friday nights are sometimes busy and sometimes slow. Last Friday, Manager B had to abandon her date to help her staff. She won't make the same mistake. She schedules four people to make sure the shift is covered. She is delighted when her date isn't interrupted, but not so delighted when she realizes the labor costs well exceeded the profits for the evening.
She guessed wrong.

Employee C

Employee C is a hard worker who excels at making sales. She genuinely cares about customers and takes pride in making the store look clean and inviting. Unfortunately, Employee C is frustrated at constantly seeing busy shifts go to other employees--especially Employee D. Her frustration builds with every low-grossing and boring shift. Even though she likes her job, she hands in her notice so she can find work somewhere where she can stay busy.

Employee D

Employee D is really a rock star. He's working to support his dream, and he can't be expected to resist the temptation to write down that killer lyric when he thinks of it-- even if there are customers waiting. He hates super busy shifts. They leave him feeling overwhelmed, and he just isn't that great with making sales. He wishes his manager would stop putting him on those shifts and give them to Employee C. She isn't a rock star and seems to actually enjoy work.

D and E could clearly identify the type of product that would empower companies to avoid a myriad of scheduling problems. They created a list of functions that would meet the needs of many companies struggling with scheduling their employees. However, they had little product experience, and creating their software-as-a-service product and taking it to market would require the right development partner to help design and build their product from the ground up.

THE PROBLEM

D and E were ready to start transforming the way people schedule, but they needed a technology partner that would provide an innovative CTO-like function. They wanted a partner who would be as invested in their project and its success as they were.

They had a particular tech stack they wanted to implement to create their product. The software also needed to have a level of sophistication (Artificial Intelligence) to stand out from competitors.

The list of requirements for their software partner was balanced by the need to be cost-conscious as well.

To bring their product to market, the client needed a reliable team at a good rate capable of staying within the scope and deadlines needed to bring their product to market.

Unwilling to make tradeoffs of either quality or price, the client contacted Swan Software Solutions.

They immediately saw that Swan was as committed to their company's success as they were.

THE FOCUS

With a technology partner found and contracts signed, the client needed the Swan team to build the foundation of the product as soon as possible. The MVP (Minimum Viable Product) needed to be deployed quickly to gain approval from early adopters.

As the product grew, the team needed to rapidly iterate and push forward with complex solutions revolving around integrations and Artificial Intelligence.

With the focus clearly defined, the team got to work.

THE TEAM

Team Members included:

- Project Manager/Scrum Master
- Lead Developer and Architect
- Back-End Engineer
- Front-End Engineer
- Quality Assurance Team

DEVELOPMENT

Getting to MVP took about 4-6 months of development. With Swan's technical expertise behind them, the client had the confidence to start the business and revolutionize the way people schedule. With each obstacle or innovation they face, Swan is there to advise and build the solution.

The client's other goal of limiting their tech debt as much as possible has also been successful. They are able to make responsible trade-off decisions in the moment and prepare for future growth--always with the goal of building a solution that is as Software-as-a-Service as possible.

TECH STACK

The company leverages many technologies all developed with Swan. They include:

- .NET
- React.JS
- Docker
- Sendgrid
- Segment
- Intercom
- FullStory
- Azure Cloud
- Google ML

RESULTS

- Within months of the initial release, the client secured a major partnership. Their product integrated with a Point of Sale system serving over 20,000 retail locations.
- The Software-as-a-Service product has continued to develop and added notifications, a mobile application, reporting, and full schedule automation.
- Even throughout the pandemic, the client's service maintained 95% accuracy in predicting their customer's business patterns.
- The client's schedule automation has enabled the client's customers to increase their productivity by 5% per employee.
- The ability to use scheduling patterns has provided those using the software with the ability to limit inefficiencies by 10%.
- The company was recently acquired by the company that gave them their first partnership.

Swan has been truly a part of our team. They gave us the opportunity to build [our company] with confidence and as efficiently as possible over the past few years. [Our company] was recently acquired by that first partnership we gained in the market, and we couldn't have done it without the Swan team!

Co-Founder and Client

Swan Software Solutions was privileged to help bring this innovative Software-as-a-Service to market. We can't wait to see what happens next for these wonderful clients.