



SME

Building user confidence while **reducing** cloud computing costs.

Kforce migrated from costly, legacy ETL processes to a modern approach that has widespread positive impacts on the business.

CUSTOMER STORY

KFORCE

About Kforce

Kforce Inc. is a solutions firm that specializes in technology and other professional staffing services. Each year, we provide meaningful opportunities for approximately 30,000 highly skilled professionals who work with approximately 3,000 clients, including a significant majority of the Fortune 500. At Kforce, our promise is to deliver great results through strategic partnership and knowledge sharing.

The Challenge

The current ETL process is a legacy-built process, a black box where the components are inaccessible, to get the data from source to analyst using many steps and technologies. Without access to how it works or any of the underlying processes, proper administration and optimization is extremely challenging. As is, the current ETL process is expensive and costs are increasing dramatically over time, even month to month. The large increases in the Azure cloud spend from this one process are problematic and detrimental to improvement projects as more and more funds are having to be allocated to cloud computing.

Additionally, the stability of the overall system was lacking and negatively impacting the confidence level the business had when it came to getting data in a timely manner. In some cases, processing was not completed in time, causing other related jobs to fail or just failing outright. Because of it being a “black box”, the root cause was undeterminable. With the processing delays and/or failures, resources have to be on call or are getting called away from improvement projects to make ad hoc fixes.

Project at a Glance

Assess and eliminate legacy Extract, Transform, and Load (ETL) processes because of the need to:

reduce costs.

understand what’s happening.

build a process internal to current systems that could be more efficiently managed and modified.

Similar projects result in a 20-30% reduction in processing time and cost.

The Solution

To accomplish the goals, Kforce partnered with SME Solutions Group to look at the different methodologies and technologies that were used within the legacy ETL process and modify them to be more efficient.

SME’s Data Engineer (Paul Piotrowski) reviewed the legacy ETL process and suggested several different routes that would help accomplish the goals of the project. By detailing out the pros and cons with each, it was decided to “rip and replace” the legacy ETL process with a more robust and streamlined methodology that aligned to industry standards. In many cases, two or three of the steps used in the legacy ETL process were able to be removed when the new streamlined methodology was built out.

The streamlined methodology allowed for three separate processes to be phased out:

1. an old technology causing stability issues
2. a Microsoft technology that's being decommissioned
3. the black box preventing modifications and optimizations

The first two processes in the list above were previously not identified as an issue but were recommended for removal by SME's Data Engineer as being beneficial for the stated goals. According to Kforce's project leader, Jake Bingham, "we didn't know we were going to be able to get rid of or needed to get rid of some of the legacy processes, but we found out that we needed to, so that was a bonus."

Jake commented on how "the open communication between our team and Paul provided value" to the project. "Paul provided regular updates about challenges and risks to the project and every week we get a breakdown of what's been going on, what's done, what's next, roadblocks faced, and when those roadblocks have been cleared. I don't have to guess with what is going on with the project because of the open communication and status reporting."

Business Impacts for End Users

This project was a key step in building user confidence in Kforce's new modern data ecosystem - Information Marketplace.

The project combined three legacy processes into a new streamlined process that is more stable, more predictable and easier to govern. From the data consumer perspective, the benefit is that they have more confidence that their reporting systems are ready to go whenever they come in. "Now we don't have to tell them their data is late going forward", according to Jake, who is overseeing this project as it is one of the major business components of their overall Information Marketplace.

The Results

It reduced the processing time of one of the legacy processes **six hours down to 30 minutes** for a delta load of the data. This significant reduction in how long it takes to process the data and get it out to the data consumers reduces various backlogs.

"It's like an electrical outlet, you know it's there and assume it's going to work. When it doesn't, that's a problem and creates angst across the group." This project made the "outlet" **more dependable, more reliable**.

Additionally, Kforce learned a repeatable pattern that they can use later. They have already started incorporating additional pieces that use the same type of methodology in curating, grabbing, collecting the data, and performing detail processes.

The results of the Kforce project align to results seen at other companies who are now benefiting from a **20-30% reduction in processing time and cost** following a similar project.



Now we don't have to tell them their data is late going forward.

SME Solutions Group, Inc. works with organizations across industries to bring a lasting and modern approach to Business Intelligence (BI). SME's team of certified analysts, architects, admins and trainers holistically approach pain points to find solutions in areas of cloud transformation, data literacy, data governance, software support and assessment. With core values of embracing the importance of data, SME carefully chooses technologies that provide insights and clarity to its clients. With extensive expertise, clients are provided a seamless integration of their BI platforms and newfound capabilities of working with data.