



TECHNICAL & SCIENTIFIC APPLICATION, INC.

Financial Services Company: From Aging Infrastructure to Composable Growth

About the Company:

Since its inception in the early 1900's, a Financial Services Company (FSC) has stood behind its core values of serving the people in their community, building trust, and architecting for simplicity. For over a century, the company continued to grow steadily by focusing on customer relations and acquiring other financial services companies to bolster their service offerings.

By the 21st century, FSC had expanded their operations both domestically and internationally. The company is proud to demonstrate their financial security—as evidenced by their repeated “A” ratings from myriad rating agencies. Their commitment to excellence permeates the entire organization, and the IT department's values are consistent with those of senior management, creating a unified and thoughtful work environment where employees regularly spend a decade or longer.

The Company's Challenges:

As a financial services company, FSC meticulously weighs the long-term implications of its decisions. While the IT group works with a shorter time horizon as compared to the company's underwriters and actuaries, they remain forward-thinking. The company's IT department regularly updates its equipment to stay at the forefront of technological innovation. As such, they must:

- Carefully consider the end of sale periods for equipment
- Consult with manufacturers, partners, and integrators, as well as industry experts
- Determine what new equipment is appropriate
- Ensure that new purchases can be maintained reliably

When FSC's tech team began researching the next solution for their aging infrastructure (which was based on c7000 blades), they were initially uncertain about HPE's Synergy platform. Scrupulous in all things, the company wanted a second opinion to confirm whether HPE Synergy would be the best solution for their business.

As it is, TSA has served as the industry expert and business partner for FSC's IT department for nearly twenty years now. Our business relationship is built on similarly shared core values—trust, caring for the people in our community, and architecting for simplicity while providing nearly limitless scale. We have naturally cultivated a deep level of confidence between the two companies because of the dedication and technical support that our TSA teams have unfailingly provided them time and time again (including a weekend outage

where we spent close to ten hours troubleshooting onsite with the FSC IT team). Most importantly, the time that the teams spent together and our mutual commitments to success revealed the true motivation behind the relationship. No project is too trivial; no initiative too large.

We know them well, and we support them well, so when the Financial Services Company approached us with concerns about updating their infrastructure, we were able to draw on our deep institutional knowledge of the organization. Over the course of several months, we took the time to talk through their current architecture and what Synergy would look like in their environment.

What They Needed:

Financial services companies are notoriously risk averse; they spend their entire corporate existence making contingency plans for mitigating disasters. That mindset was similarly infused throughout FSC's IT department.

Their IT team was acutely aware that their existing infrastructure of c7000 chassis was quickly becoming outdated, and they wanted to move on to a more forward-focused architecture for the future. Because the existing infrastructure utilized several dozen chassis, the team also knew that substantial planning was required before an implementation of any solution could be considered. As such, they relied on the expertise and guidance of the TSA team.

TSA meticulously compared the benefits of HPE's Synergy platform to those of the older HPE c7000 chassis and the new c7000 models. The company had researched Synergy before and came away unimpressed; the previous presentations, at the time, had failed to highlight potential drawbacks and pitfalls of Synergy versus its competitors. To alleviate FSC's initial concerns, TSA leveraged its industry experience to paint a more realistic picture of how the three systems operated in congruence with one another. Through instructional meetings and whiteboard sessions, we provided side-by-side comparisons of their current environment with demonstrations of the Synergy Frames at our Birmingham office.

Our team also demonstrated what Image Streamer enabled—a paradigm shift to a composable infrastructure that would:

- Deploy infrastructure as Code
- Improve deployment speeds of gold images
- Reduce the amount of time that their top technologists spent on deployment operations

In the end, this presentation and comparison initiative helped FSC confirm (against their initial research) that Synergy would indeed be the right enterprise solution for their company. The company's IT team was looking for efficiency, ease of management, and the ability to grow into a composable infrastructure in the future—TSA was able to demonstrate that Synergy satisfied each checkbox.

With the decision made, the first step was the considerable task of decommissioning the existing infrastructure and installing the HPE solution.

What We Provided:

TSA and FSC began working together on a design for the new infrastructure environment. We then built configurations that would meet the technology needs.

Then it was time to plan for the installation of the HPE Synergy infrastructure. The first step was to decommission several c7000 chassis and several dozen of the corresponding blades in order to make room for the clusters of incoming Synergy units and several dozen new Synergy blades (to be used first for a trial period then in production in a larger-scale rollout).

This process was completed on day one, indicating both companies' commitment to speed and efficiency during the upgrade. Our technicians executed the Synergy changeover while still utilizing FSC's existing VMware and Hyper-V environments.

On average, it took FSC one business week to deploy a single server (with the former infrastructure); TSA promised to do all of the new servers in just three days—the speed and scope of which was unparalleled for both companies. At this proposed rate of speed,

TSA calculated that they would only need 192 man-hours to complete the entire deployment. By coordinating both businesses' resources and sticking carefully to the multi-phase implementation plan, TSA was confident that they could meet the timeline restrictions.

The Financial Services Company has been impressed with the Synergy solution in practice and has extended their investment in Synergy by ordering numerous additional frames to continue their transition.

What the Financial Services Company and TSA Accomplished:

While the full transition from c7000 to Synergy is still in the final stages, the Synergy frames initially installed are providing favorable results for FSC with production workloads. Deployment is streamlined to the point where, once the frame is connected to the network and power source, the configuration and firmware updates automatically complete.

Under their former infrastructure, FSC required:

- 90 IPs simply to manage the c7000 (and this doesn't even include all of the IPs for the blades themselves)
- 12 network drops
- 12 storage drops
- 72 power drops

Intrinsically, the Synergy infrastructure offers better service with significantly reduced resources:

- 108 IPs for all frames (including blades)
- 2 network drops
- 2 storage drops
- 2 power drops

The simplified nature of the Synergy platform increased the control FSC has over its infrastructure while eliminating the need to coordinate different teams within the IT department for simple change requests. This project has also bridged the gap between the network and system administration groups within the company, enabling FSC's teams to communicate together in a way that they never had before. After an initial bulk provisioning of IP addresses by the network team, the Synergy infrastructure is now entirely managed by the system administration team. The system is largely automated and interconnected, dramatically improving deployment and infrastructure management.

Ultimately, the Synergy infrastructure provides The Financial Services Company with significantly more room to grow while reducing the number of resources needed to sustain that growth. TSA is excited to be a part of such a challenging process, especially because we're working with a company whose business practices and community investments so clearly align with our own.



ARE YOU RUNNING ON AGING INFRASTRUCTURE AND NOT SURE WHAT THE NEXT STEP SHOULD BE FOR YOUR BUSINESS?

Contact TSA today, and together we'll build the right foundation for your future growth.