

CASE STUDY

# How ZAG Technical Services Helps Applied Physics Systems Run a More Productive and Competitive Business—and Save \$100,000 a Year



“We’re really happy with ZAG because they care about making our business better.

Everything that ZAG recommends is purely in the best interests of our business.”

**Bryan Fujii,**

Operations Manager, Applied Physics Systems



Applied Physics Systems is a worldwide leader in the design and manufacture of high-performance magnetometers, directional and gamma sensors, and magnetic field measurement.

Its products are used in the aerospace, defense, unmanned mobility, medical, research, and energy industries.

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## HIGHLIGHTS

### CHALLENGES

- Restructuring the business and losing their IT manager
- Suffering significant knowledge loss
- Experiencing daily breakdowns because of outdated technology infrastructure
- Lacking visibility into technology assets and who was accessing them
- Wasting time and money patching up unstable systems
- Risking future success unless they could find a better solution

# Challenges

## Outdated infrastructure and IT challenges cause costly downtime and operational inefficiency

When Applied Physics Systems (APS) restructured its company to meet new strategic objectives, they set about reorganizing management and consolidating a number of job roles.

As part of the reorganization, APS decided to reduce IT-related costs by removing the position of in-house IT manager, and distributing the workload among other employees.

Unfortunately, they underestimated the operational impact of that decision.



“When we let our IT expert go, we discovered that we really didn’t have a handle on how our technology was set up and had no idea what our technology infrastructure was,” explains Bryan Fujji, Operations Manager at Applied Physics Systems. “The knowledge loss also meant we didn’t know how to remedy IT problems when they arose.”

While the staff tasked with picking up IT workload did their best to keep the environment stable and secure, a lack of technology acumen began to affect business velocity and productivity.

APS’ outdated infrastructure only made the situation worse.

Daily breakdowns across its network, connections, individual systems, and flawed ERP were the norm; bringing manufacturing, and other essential workloads, to a standstill.

## SOLUTION

Applied Physics Systems hired ZAG, which delivered:

- **All-Managed Services**
  - All day-to-day help desk, maintenance, and cybersecurity needs are seamlessly taken care of
- **Strategic consultancy**
  - Analysis of current environment
  - Prioritized plan to remedy issues
  - Upgraded servers to drive operational efficiencies
  - Moved to Microsoft 365 to improve security and simplify scaling
  - Deployed Cisco Duo to enhance security and network visibility
  - Upgraded ERP to improve analytics and business performance
- **Security awareness training**
  - Educated staff on how to recognize and respond to threats
  - Quarterly simulated attacks identify who's still vulnerable

## RESULTS

- More resilient, secure, productive, and competitive
- \$100,000 saved each year
- Downtime all-but eliminated; so APS can handle more orders and boost bottom line
- Ongoing support to make their business more successful and profitable



“Typically the ERP system would shut down multiple times a day, sometimes for up to 30 minutes, while someone scrambled to figure out how to fix or reset something,” says Bryan. “Our outdated infrastructure and lack of technology experience was seriously affecting our ability to operate as a manufacturing business.”

So much daily downtime was dramatically reducing production capacity—and costing APS significant time and lost revenue.

With a total lack of visibility into what technology assets they owned, APS found themselves wasting even more money.



“When we restructured, we were left with a stockpile of old technology, so when someone’s equipment broke, we’d just dig out another old machine for them,” explains Bryan. “However, because we didn’t track anything, we couldn’t always recover software licenses from the old machine. So we’d waste money buying new licenses for whatever applications the employee needed to do their job.”

The technology environment that APS relied on to fulfill orders and satisfy customers was becoming increasingly chaotic; potentially putting the business’ security at risk.



“We were relying on people who weren’t properly trained in IT, but knew a little bit about computers, to patch things together as much as they could. But it resulted in us having an incomplete and unstable IT system,” says Bryan.

APS’ productivity, stability, and future success was potentially at risk if they didn’t find a better solution.

“Our outdated infrastructure and lack of technology experience was seriously affecting our ability to operate as a manufacturing business.”

## Solution

**All-Managed Services Agreement and modern technology infrastructure enable business success**

APS heard about ZAG Technical Services—an IT and technology consultancy focused on accelerating business success—from a trusted supplier and was interested in learning more.

Like many businesses considering outsourcing IT for the first-time, APS was a little apprehensive.



“We were worried about the potential cost of IT contractors and the possibility they might oversell technologies we didn't need and take advantage of our situation,” explains Bryan.

After several conversations with ZAG's sales team and leadership, any fears disappeared.



“The more time we spent with ZAG, the more we saw that everything they recommended was purely in the best interests of our business,” says Bryan.

## ZAG's All-Managed Services Agreement

To bring order where there had previously been daily chaos, APS engaged with ZAG to deliver its All-Managed Services Agreement to cover their main corporate site.

Instead of APS wrestling with day-to-day technology challenges, ZAG would now take care of all APS' help desk, maintenance, and cybersecurity needs, including:

- Automatically updating third-party applications and continually patching servers
- Automatically updating their OS and anti-virus software
- Continually monitoring all devices and servers
- Providing rapid, remote helpdesk support to everyone at the site
- Strengthening system security by running regular scans and vulnerability testing

With ZAG's experts taking care of such a broad scope of support, APS' staff could perform their job functions more efficiently, without technology slowing them down.

## Strategic consultancy and project support

Next, APS worked with ZAG on several strategic projects designed to improve business efficiency and performance.

To understand exactly what APS needed to be successful—and build an evidence-based plan for change—ZAG ran an assessment of APS' current environment.



"We asked ZAG to do an assessment of our IT infrastructure and come up with some options for remedying any issues," says Bryan. "ZAG analyzed and mapped our network, identified security issues and areas of concern, and then came up with a prioritized plan of work to tackle them."

ZAG identified the best technologies to leverage to meet APS' goals and needs, and:

- **Upgraded APS' servers** to drive operational efficiencies and reduce costs

- **Deployed Cisco Duo** on APS' VPN connections, which provides extra layers of security and greater visibility into who's accessing their network. ZAG also implemented an AI-based EDR platform, which works around the clock to detect threats and enables infiltrated systems to be restored quickly
- **Upgraded APS' ERP system (M2M)** to support more innovation in the business, and improve business analytics and operational performance
- **Moved APS from G Suite to Office 365**, to enable more flexible working, improve security, and make it simpler for the business to scale

## Security awareness training

With criminals increasingly infiltrating business' essential technology systems, ZAG advised APS to run security awareness training for its employees.

The training, delivered through platform KnowBe4, showed employees how to recognize and respond to evolving cyber threats. Staff also receive simulated phishing tests every quarter to see how resilient to attacks they really are.



"It's been comforting to know this training is in place and to have ZAG manage it for us," says Bryan. "It didn't take up a lot of time or cost for us and is really helpful at pointing out staff who aren't paying attention. We can then address any concerns with those individual users."

## Extending ZAG's support to new locations

With infrastructure at its main corporate site now modernized—and day-to-day technology needs comprehensively met—APS is rolling out ZAG's All-Managed Agreement to two further locations in Houston and Calgary.



"We're in the process of rolling ZAG out to those other sites," says Bryan. "By incorporating all locations into the agreement, we will standardize the user experience, so staff can work at any location with a single log-in, and strengthen our company-wide security, which reduces business risk and supports business continuity."

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## Results

**\$100k worth of internal time savings, increased production capacity, and improved efficiency**

APS is more resilient, secure, productive, and competitive since partnering with ZAG.

With ZAG’s client-centered experts managing all their day-to-day technology needs, and providing exceptional strategic consultancy, APS saves significant time internally.

**The time savings that ZAG has unlocked are saving APS as much as \$100,000 a year.**



“The cost savings are significant,” says Bryan. “We probably save anywhere from \$50k to \$100k annually, because it’s much more efficient to have a company like ZAG helping in all directions, rather than have people internally running around like chickens with their heads cut off, trying to solve multiple problems at one time.”

The daily downtime that previously reduced production capacity is virtually eliminated. APS was able to go from reactive to proactive across their technology systems, change the way they conduct business, and remain operational.

This is thanks to a more resilient network, and ZAG’s responsive help desk that resolves even complex problems quickly. With less downtime, APS boosts productivity, handles more orders, and improves its bottom line.





“ZAG’s excellent response time reduces the amount of time lost to breakdowns, which significantly reduces the cost impact of downtime across multiple departments,” says Bryan.

APS’ partnership with ZAG mitigates the risk of knowledge loss and enables business continuity.



“We have comfort knowing that ZAG, rather than a single person internally, understands our infrastructure,” says Bryan. “Whatever staffing changes might happen in the future, anyone from our company will still be able to call into ZAG, work with the right people, and have the information they need to continue making decisions and run the business efficiently.”

Bryan recommends ZAG to any business wrestling with outdated infrastructure and looking to improve productivity and efficiency across their operations.



“ZAG keeps your infrastructure, networks, and general IT management so much better organized,” says Bryan. “Not only do they have project managers who I deal with regularly, they have technicians and engineers who specialize in different areas. So any kind of a problem we’ve run into, they quickly support us and coordinate the project seamlessly. The response time for anything that we need is almost immediate.”

Bryan and APS are grateful to have ZAG on their shoulder, meeting every need responsively.



“Our technology management and strategy is such a huge difference from what we had before,” says Bryan. “We’re really happy with ZAG, because they care about making our business better. It’s a true partnership between the decision-makers here in APS and ZAG’s exceptional team.”



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**Find out how ZAG’s Managed IT Services can enable your success**

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