

GE Capital reduces PMS run costs by 66 per cent with Advanced application modernisation

GE Capital reduced its annual application run cost by 66 per cent when it upgraded its PMS system through Advanced, moving to a modern, open Unix environment — and users didn't even notice the change.

The challenge

Our company needed to modernise its PMS solution, as the original software was built in-house in 1987, starting life as a 20,000-account schedule system without any interfaces. As with most home-grown systems, it was built out of necessity and to serve the business as it existed at the time.

We wanted to move our PMS suite of applications from ADS/O and COBOL/IDMS running on a mainframe, to COBOL running with Oracle on Unix — without changing the user interface (UI) in the process.

Over the decades, our PMS grew in size and complexity, becoming the central nervous system of both GE Capital's direct and indirect business unit — with over five million account schedules, 382 interfaces, 1,700 concurrent users and 3.5 million transactions per day, running against 71 million lines of code. As our Executive Director of Application Development, Marc Rubel, says, "PMS is the sun in the universe of the GE Capital leasing business. This is a system that if it goes down, we are out of business at a very expensive cost."

Three reasons for modernising

1. We needed a system with technologies and methods familiar to the present generation of application designers and programmers, so they can easily understand, maintain, modify and adapt it to changing needs. As Rubel says, "The kids coming out of school don't want to know about IDMS and ADS/Online, it's just not attractive from an employee point of view."
2. We wanted to improve security and continuity by introducing modern disaster recovery systems.
3. And, with the ratification of new rules and regulations occurring at an increasing rate, the need for nimble change had become paramount. Rubel says, "...but we were on the mainframe. It wasn't fast, wasn't efficient, it couldn't change as fast as we needed to. The firm's ability to innovate was actually hampered by the fact that we were on this flat file database...we were slowing down the rest of our business."

Client >

GE Capital

Sector >

Commercial lending operations

Project >

Re-platforming an in-house PMS system

"I thought I knew what my application did, but I was wrong. Advanced showed me how much more there was than I assumed."

Marc Rubel > Executive Director of Application Development > GE Capital

Putting in the groundwork for modernising a PMS

“Even my most senior guys, the guys who designed and built the original setup, couldn’t tell the difference.”

Marc Rubel > Executive Director of Application Development > GE Capital

Advanced conducted the mainframe assessment, ADS/O conversion to COBOL, database design and data migration. They used DB-Shuttle® automation technology to allow preliminary conversion of the database design and application software.

From pilot to deployment

We test-drove Advanced’s and TmaxSoft’s technologies through an initial proof-of-concept; it demonstrated that the target code was well-formed and easily maintainable, and the IDMS database converted as we expected, with no surprises.

Then the Advanced team conducted a mainframe assessment, which proved vital because:

- > it reduced the project scope by 78 per cent
- > it enabled us to make smarter and more effective decisions about the implementation
- > and gave us a clear plan

Next, we ran a pilot to prove to our user base that their UI wasn’t going to change, and to make sure the solution would work on GE hardware under our roof. Rubel says, after the pilot phase, “Even my most senior guys, the guys who designed and built the original setup, couldn’t tell the difference.”

One of our users commented, “Of everything that I saw and tested, there was no noticeable difference between the re-platformed system and production PMS.” Another added, “The applications in general looked the same to me. I utilized the same key functions as I would in normal PMS. It felt like just another PMS mainframe session. I didn’t see any issues as far as the look and the manoeuvring from one option to the next.”

Reduced run costs, footprint and disaster recovery time

In the end, our PMS application suite, data and databases were converted and ready to begin their new life within four months - remaining on-track to deliver a return on investment in 1.8 years. The total modernisation of our PMS application suite, and the data that drove it, took more than a year to complete.

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- > Our annual run cost for the PMS system and related applications fell by 66 per cent
- > The time taken for PMS to recover from disaster decreased by 240 per cent
- > Our overall application footprint shrunk by 78 per cent

Supporting growth and innovation

While the cost savings for GE Capital were enormous, the most positive result was moving to a platform that integrates easily with the rest of the business and which supports growth and innovation.

Rubel adds, “Once you do the pre-work — and that’s why I stress that assessment so much — the build is easy...the automation Advanced has for that code is really cool. It turns out that of the 71 million lines of code we had in PMS, we only used 16 million. Insane, absolutely insane. We identified 22 of these unique areas that needed to be addressed before we could move forward. We found languages that nobody knows anymore, so it was critical information and reduced the cost and the scope of this project greatly.

“After it was all over, I was floored by the fact that there were only 14 issues raised in final testing in the first 72 hours. That’s unheard of. These deployments went well. They went really, really well. I have to be honest, I thought I knew what my application did, but I was wrong. I wasn’t even close. Advanced showed me how much more there was than I assumed.”

More information

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