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Software company future-proofs application services management with HCLTech

HCLTech worked with the software company to drive rapid application modernization and visibility into intelligent insights

The client, an American multinational provider of database and analytics-related software, products and services, has partnered with HCLTech on its infrastructure operations since 2009. Faced with several application service management (ASM) challenges, the client turned to HCLTech to increase automation, provide robust monitoring and rapid application modernization and deliver visibility into intelligent insights.

The Challenge:
Bringing application monitoring, performance and customer-facing service quality into the future

In 2018, the client faced several application service management (ASM) challenges, so it embarked on an ASM initiative to bring application monitoring, performance and customer-facing service quality into the future. The challenges included:

- High volume of service requests (SRs) and repeaters
- 15 year old non-standardized processes
- Lack of tool harmonization across projects
- 150 applications across multiple technologies
- Monolithic customer-facing applications
- Lack of application modernization
- Lack of documentation for most applications

The client issued an RFP and ultimately asked HCLTech to upgrade the ASM for 120 of its 150 applications.

When the transition began in February 2018, the HCLTech team quickly discovered that the client's current status was less mature than the

RFP had indicated. (The RFP process, conducted by a third party, was performed without consulting some key client stakeholders.) In conducting its own investigation, including interviews with client stakeholders, HCLTech unearthed these issues:

- Ticket volume was 200% higher than reported
- Source code was saved on client engineer laptops
- Changes were made directly in production
- Most applications that had been built in Java or .NET were monolithic and had not been upgraded in 20 years
- There was a multitude of P1 and P2 issues
- The client had no monitoring solution

This absence of stability made it clear that HCLTech's RFP-based analysis and solution had to be revised.

The Objective:
Automation, visibility into intelligent insights, robust monitoring and rapid application modernization

The HCLTech team developed a transition plan for an ecosystem of bots and dashboards to meet four main objectives:

Aggressive automation using robotic process automation (RPA), scripts and automation of SRs, when applicable

Robust monitoring of jobs, logs and the infrastructure to be integrated with the command center

Visibility into intelligent insights via persona-based reporting and real-time dashboards

Rapid application modernization, retiring 30+ legacy applications and migrating retained applications to SaaS platforms such as Salesforce, Workday and Snow

The Solution:
An innovative and future-proof ASM function

The HCLTech team quickly established an innovation council whose mandate is to oversee and strategize the initiative. The council, composed of client and HCLTech stakeholders, meets every quarter. Using its roadmap, which is also tracked in monthly and quarterly business reviews, HCLTech reports on recent achievements and proposes IT, business operations and transformation innovations for the next three to six months. The council then discusses and prioritizes tasks.

Let's examine the solution in detail.

Aggressive automation

The high percentage of repeatable tasks meant that the client's system was ripe for automation, so HCLTech introduced RPA in 2018 to automate the client's GitHub tickets, VPN connection requests and SharePoint requests. Point automation was used to automate ESA requests, and HCLTech launched a chatbot digital assistant with numerous scripts to help users accomplish tasks using natural language.

Robust monitoring

In 2020, HCLTech and the client collaborated on a solid monitoring infrastructure to reduce P1 and P2 issues. HCLTech proactively identified issues and introduced a central monitoring server for all SQL databases. A centralized log aggregator from more than 70 applications now provides ML-based insights that help HCLTech predict and prevent potential downtimes.

Visibility into intelligent insights

HCLTech created a CIO dashboard with three components: Ops metrics, chiefly for the CIO's eyes; project status data pulled from Jira for portfolio managers; and application monitoring run by WhatsUp Gold, which provides insights from the client's analytics platform to senior leaders.

In 2019, HCLTech delivered persona-based reporting using ServiceNow, and job monitoring were centralized and integrated with ServiceNow to enable tracking. Using Run.Advisor, insights into ticket patterns helped HCLTech identify future automation and problem management opportunities.

The Impact:
Repeatable, scalable success

HCLTech and the client have now completed four years of successful collaboration on this initiative. The key accomplishments include:

Automation

This engagement is best in class regarding identifying and delivering automation opportunities. In just 18 months, HCLTech automated 100% of GitHub tickets and VPN connection requests, saving 30 hours and 150 hours of work per month, respectively. Automation of 70% of ESA requests saved 180 hours per month, while the central monitoring server for SQL databases saved 1,608 hours per month.

Automated SR management increased from 300 to 800, while manual SR management decreased from 800 to 300 – a 70% improvement in both directions. P1 and P2 incidents decreased from 40 to four every six months, a 90% improvement. In fact, no P1 incidents have occurred in HCLTech-managed applications in the last year.

Initially, HCLTech and the client retained eight additional resources to manage ticket volume, but with HCLTech's improvements, the client was able to realize 15% year-on-year productivity growth and 15% cost reduction.

Visibility into intelligent insights

In a show of true enthusiasm, the CIO displayed outsized versions of HCLTech's first dashboard outside his office. The client found the dashboards so useful that it eventually developed others based on HCLTech's model.

Robust monitoring

Problem management and monitoring have eradicated 17% of tickets.

Repeatable, scalable success

Many solutions HCLTech employed for this initiative are highly repeatable and scalable for other organizations: SR automation for asset provisioning, RPA management of SRs for Salesforce and FinancialForce, ESE automation for customers with Oracle ERP who need user access provisioning, and the dashboard templates. HCLTech's knowledge management academies help to ensure client user acceptance and sustainability and can be applied to future ASM clients.

The future is bright

HCLTech is now automating 80% of SharePoint requests, which will save 50 hours per month. An automated CSM chatbot in ServiceNow will be integrated with knowledge articles in ServiceNow and other repositories such as Kovio and KEDB.

HCLTech will continue its consultancy and advisory services, based on the client's business needs and priorities, ensuring that the client will continue its journey to deliver a next-gen ASM solution.

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